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ABSTRACT

This is an SMSG elementary school text for second-grade students. The development of mathematical ideas in the text is grounded in appropriate experiences with things from the physical world and the immediate environment. Chapter topics include: (1) sets and numbers; (2) addition and subtraction; (3) sets of points; (4) linear measurement; (5) computing sums and differences; (6) congruence of angles and triangles; (7) arrays and multiplication; and (8) division and rational numbers. (MP)

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STUDENT'S TEXT

UNIT NO. 54

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MATHEMATICS FOR THE ELEMENTARY SCHOOL

BOOK 2

SCHOOL MATHEMATICS STUDY GROUP

YALE UNIVERSITY PRESS

Mathematics for the Elementary School

Book 2

Student's Text

REVISED EDITION

Prepared under the supervision of the
Panel on Elementary School Mathematics
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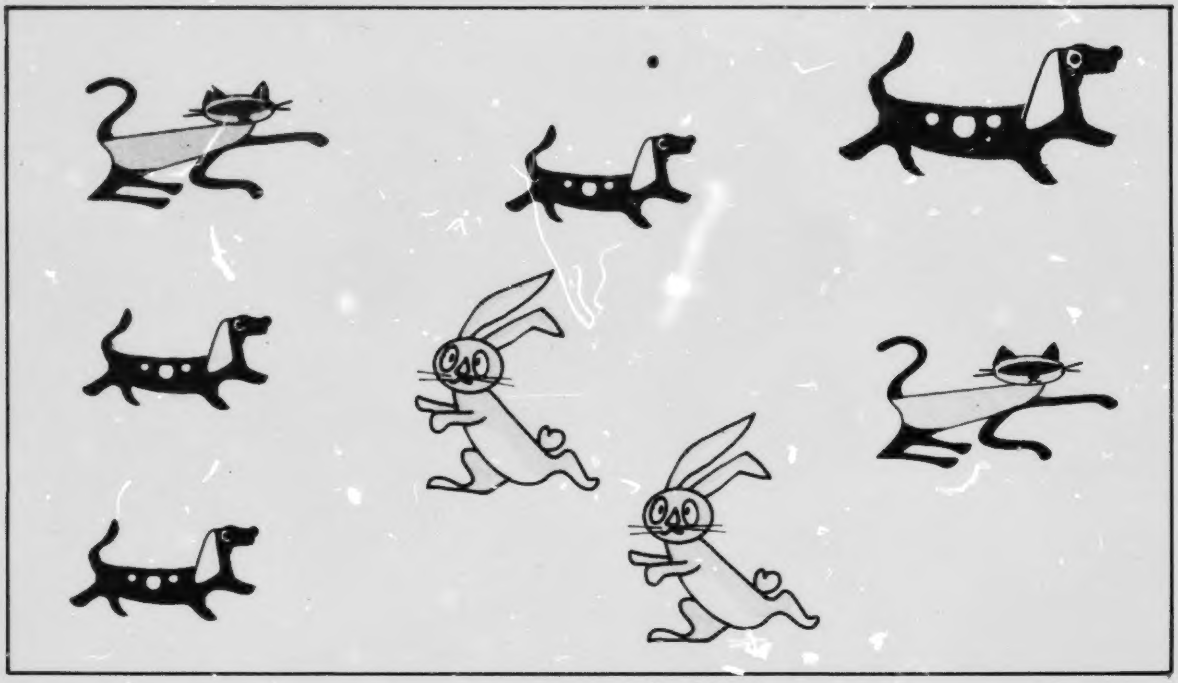


SETS AND SUBSETS

This is a set of animals.

This is a set of pets.

This is a set of cats, dogs, and rabbits.

This set of animals has _________ members.

This set has many subsets.

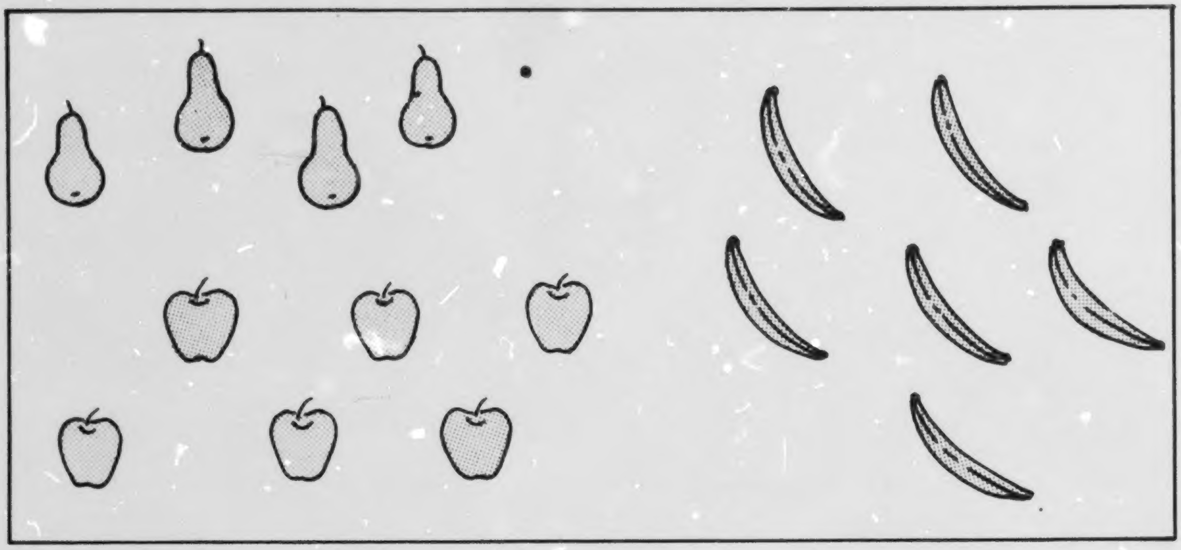
The subset of dogs has _________ members.

The subset of cats has _________ members.

The subset of rabbits has _________ members.

The subset of houses has _________ members.

The subset of animals has _________ members.



This is a set of fruit. It has many subsets.

Draw a red ring around the subset of 🍎 's.

The subset of 🍎 's has ________ members.

Draw a blue ring around the subset of 🍐 's.

The subset of 🍐 's has ________ members.

Draw a yellow ring around the subset of 🍌 's.

The subset of 🍌 's has ________ members.

Draw a green ring around a subset of two 🍎 's and three 🍐 's.

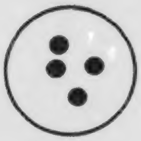
This subset has ________ members.

Draw a brown ring around a subset of one 🍐, one 🍎 and two 🍌 's.

This subset has ________ members.

Comparing Sets

Show a set with as many members. Use X's.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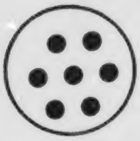
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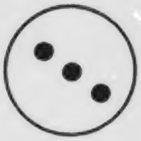
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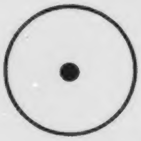
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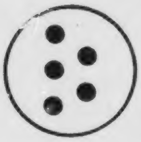
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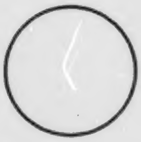
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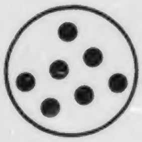
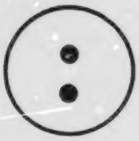

has just as many members as

Comparing Sets

Show a set with more members. Use X's.

has more members than



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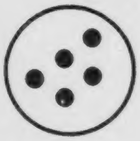

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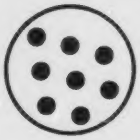

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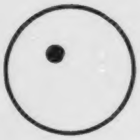

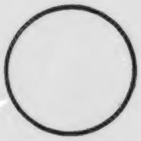

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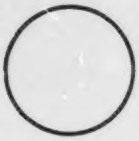

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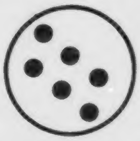
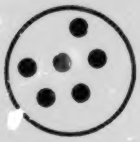
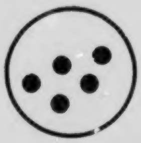
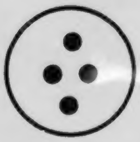


Comparing Sets

Show a set with fewer members. Use X's.

has fewer members than


has fewer members than


has fewer members than


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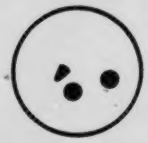
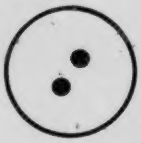


has fewer members than


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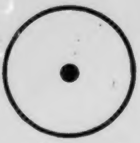
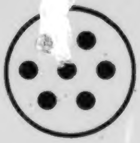


has fewer members than


★ Comparing Sets

Show a set with one more member. Use X's.

● ● ● ● ● ●	has one fewer member than	
● ● ● ●	has one fewer member than	
● ● ● ● ● ● ●	has one fewer member than	
● ● ●	has one fewer member than	
● ● ● ● ● ● ● ●	has one fewer member than	
	has one fewer member than	

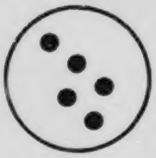
★Comparing Sets

Use X's. Show a set with one fewer member.

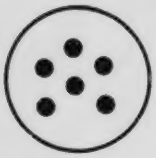
● ● ● ● ●	has one more member than	
● ● ● ●	has one more member than	
● ● ● ● ● ●	has one more member than	
● ● ● ● ● ● ● ●	has one more member than	
● ●	has one more member than	
●	has one more member than	

★ Comparing Sets

Use X's to show sets.



has one more member than



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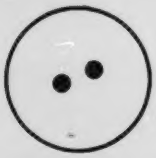

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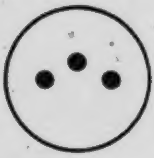

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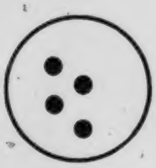

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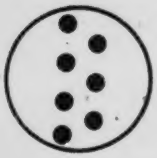
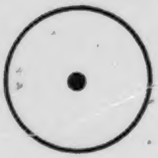
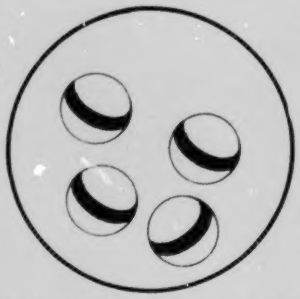


has as many members as



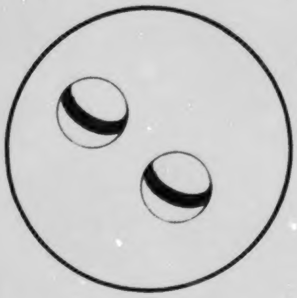
has one fewer member than

Joining Sets and Adding Numbers



This set has

____ members.



This set has

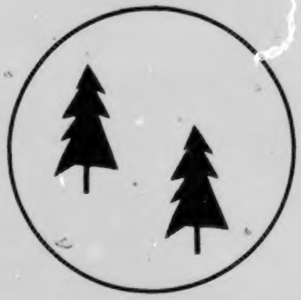
____ members.

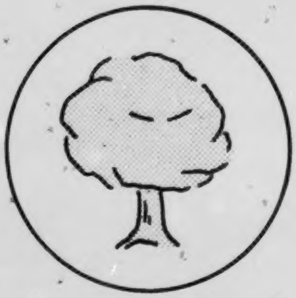
Think about the union of these sets.

It would have ________ members.

4 + 2 = ______

2 + 4 = ______





________ members

________ member

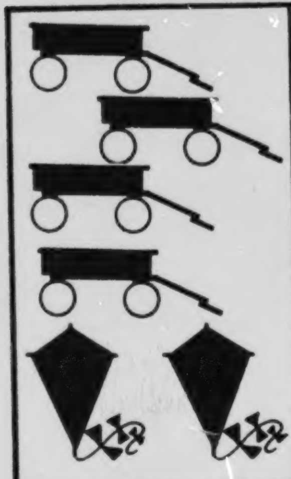
Think about the union of these sets.

It would have ________ members.

2 + 1 = ______

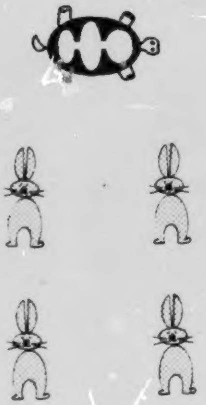
1 + 2 = ______

Joining Sets and Adding Numbers



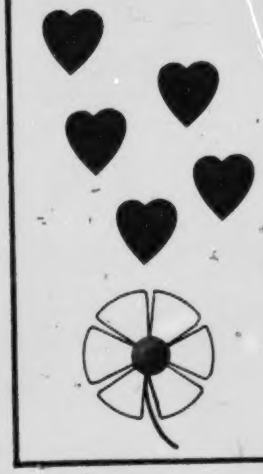
2 + 4 = _____

4 + 2 = _____



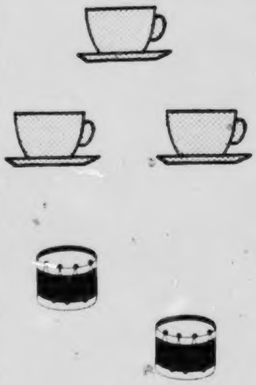
1 + 4 = _____

4 + 1 = _____



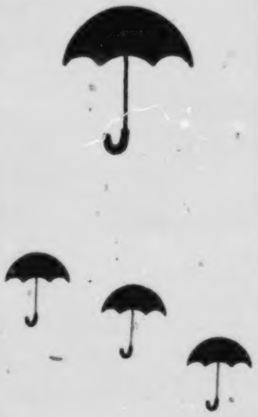
5 + ___ = ___

1 + ___ = ___



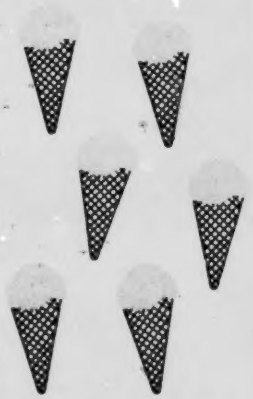
3 + ___ = ___

2 + ___ = ___



1 + ___ = ___

3 + ___ = ___



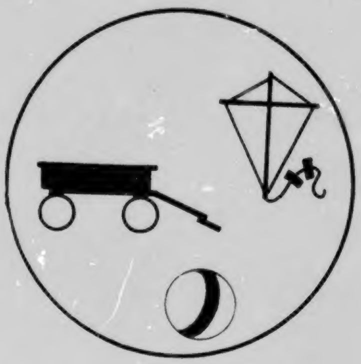
6 + ___ = ___

0 + ___ = ___

Joining Sets and Adding Numbers

Write equations for each of these.

Join



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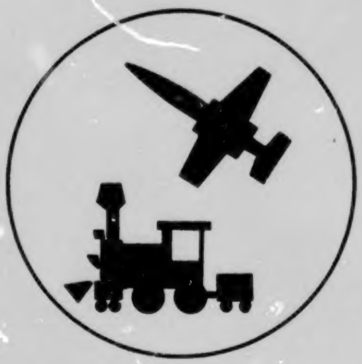
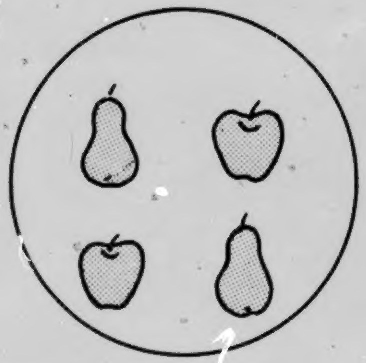


Equations: ______________________________

____

Join



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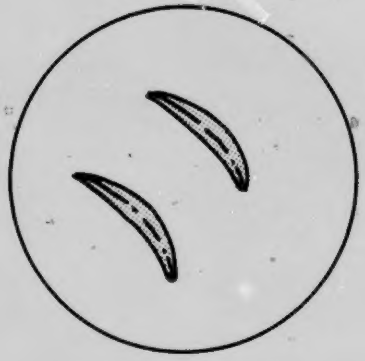


Equations: ______________________________

____

Adding Numbers

Fill the blanks.

5 + 1 = _____

1 + 4 = _____

6 + 0 = _____

3 + 2 = _____

1 + 2 = _____

4 + 1 = _____

0 + 2 = _____

5 + 0 = _____

1 + 5 = _____

2 + 3 = _____

1 + 1 = _____

2 + 2 = _____

3 + 3 = _____

4 + 0 = _____

0 + 3 = _____

2 + 4 = _____

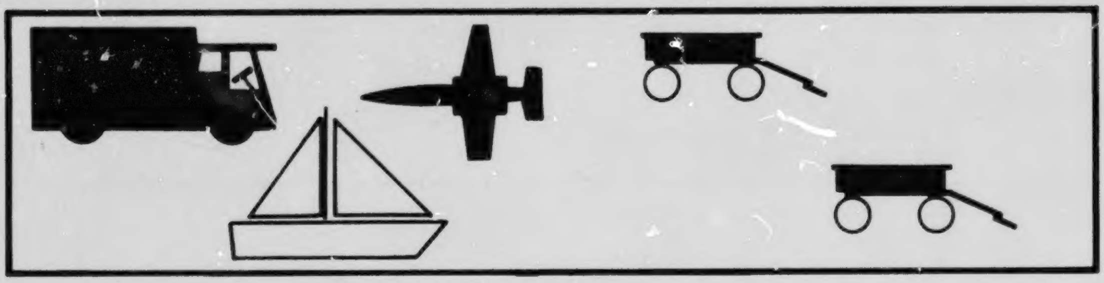
3 + 1 = _____

2 + 1 = _____

0 + 6 = _____

3 + 0 = _____

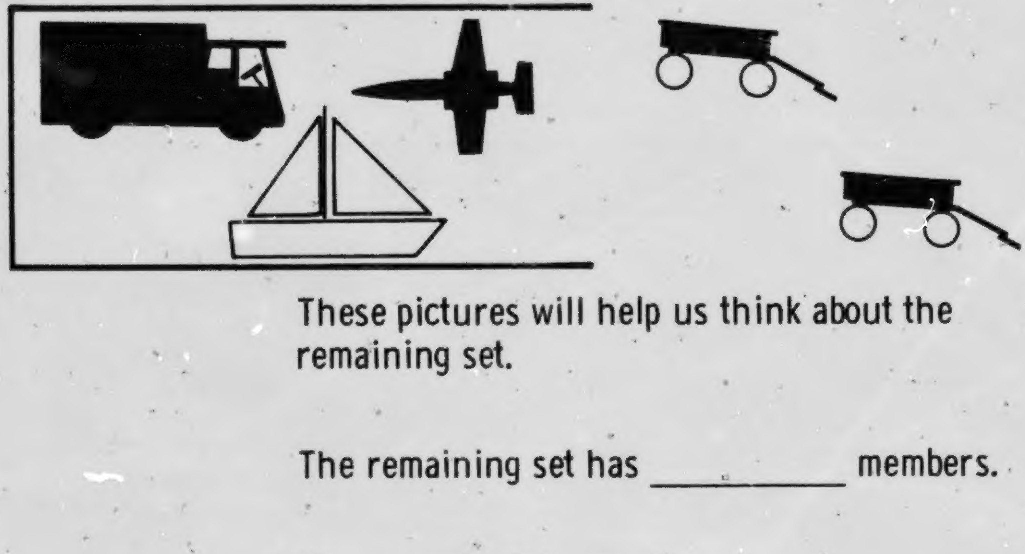
Removing Sets and Subtracting Numbers



Here is a picture of a set of toys.

It has __________ members.

Think of removing a set of 2 wagons.



These pictures will help us think about the remaining set.

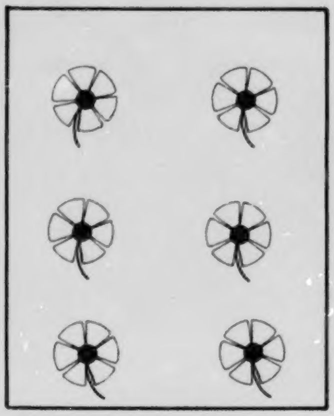
The remaining set has __________ members.

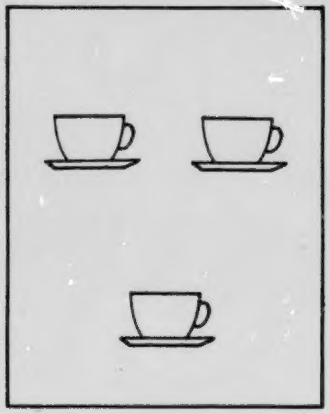
We may write this equation: ____________________.

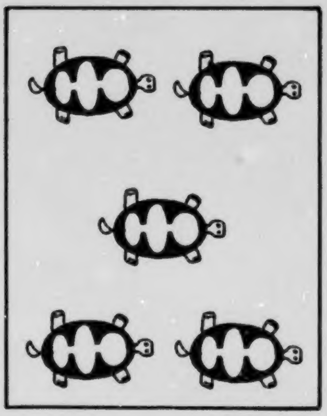
Removing Sets and Subtracting Numbers

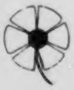
Draw a ring around the set you think of removing.

Write an equation for each picture.







Remove 2  's.

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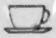
Remove 3  's.

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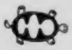
Remove 2  's.

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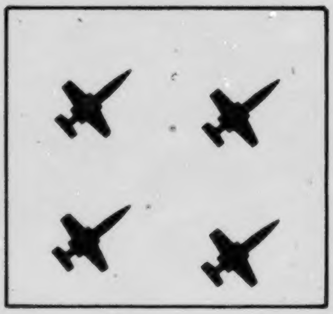
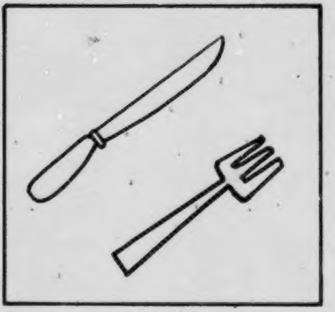
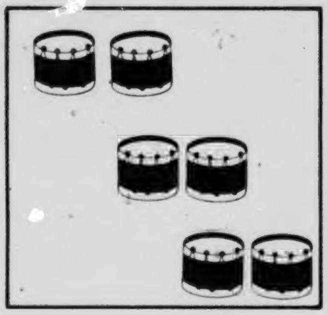
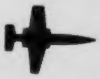






Remove 0  's.

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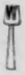
Remove 1 .

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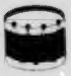
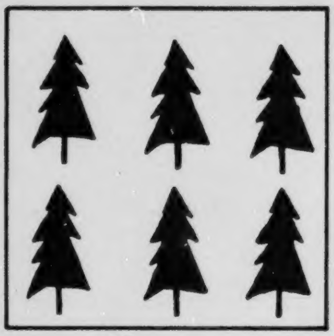
Remove 5  's.

____

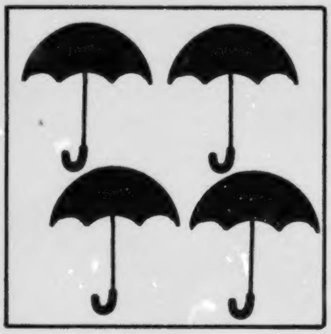
Draw a ring around the set you think of removing.

Write an equation for each picture.



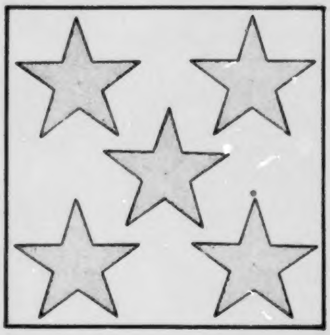
Remove 3 🌲's.

____



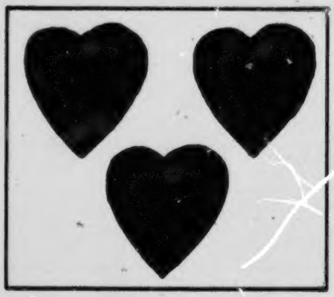
Remove 2 ☂'s.

____



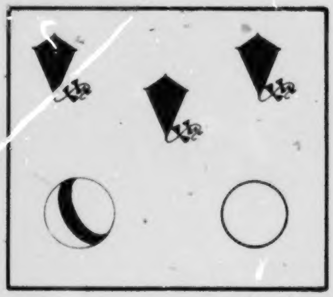
Remove 1 ☆.

____



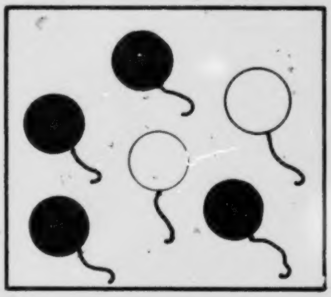
Remove 2 ♥'s.

____



Remove 3 ◆'s.

____



Remove 4 ●'s.

____

Removing Sets and Subtracting Numbers

Complete the chart.

Number of starting set	Number of set removed	Number of remaining set	Equation
6	4	2	6 - 4 = 2
5	1		
3	3		
3	0		
4		3	
			5 - 3 = 2
	4	1	
2		0	

Fill in the blanks:

6 - 6 = _____

5 - 1 = _____

2 + 4 = _____

4 + 2 = _____

1 + 5 = _____

6 + 0 = _____

3 - _____ = 1

2 + _____ = 2

2 - _____ = 2

Doing and Undoing

Fill the blanks.

4 + 2 = 6 6 - 2 = 4	3 + 1 = _____ ___ - ___ = 3	6 + 0 = _____ ___ - ___ = 6
1 + 5 = _____ ___ - ___ = 1	2 + 2 = _____ ___ - ___ = 2	1 + 3 = _____ ___ - ___ = 1
3 + 2 = _____ ___ - ___ = 3	4 + 1 = _____ ___ - ___ = 4	3 + 3 = _____ ___ - ___ = 3
0 + 5 = _____ ___ - ___ = 0	1 + 2 = _____ ___ - ___ = 1	2 + 4 = _____ ___ - ___ = 2
5 + 1 = _____ ___ - ___ = 5	2 + 1 = _____ ___ - ___ = 2	4 + 0 = _____ ___ - ___ = 4

Adding and Undoing

Finish each set of equations.

6 + 3 = ____	3 + 6 = ____

2 + 8 = ____	8 + 2 = ____

1 + 7 = ____	7 + 1 = ____

4 + 3 = ____	3 + 4 = ____

7 + 2 = ____	

5 + 5 = ____	

8 + 0 = ____	

4 + 1 = ____	

Doing and Undoing

Fill the blanks.

5 - 1 = 4 4 + 1 = 5	6 - 0 = _____ ___ + ___ = 6	3 - 2 = _____ ___ + ___ = 3
6 - 5 = _____ ___ + ___ = 6	4 - 2 = _____ ___ + ___ = 4	4 - 3 = _____ ___ + ___ = 4
5 - 2 = _____ ___ + ___ = 5	6 - 3 = _____ ___ + ___ = 6	5 - 0 = _____ ___ + ___ = 5
6 - 5 = _____ ___ + ___ = 6	3 - 1 = _____ ___ + ___ = 3	4 - 4 = _____ ___ + ___ = 4
5 - 3 = _____ ___ + ___ = 5	6 - 4 = _____ ___ + ___ = 6	6 - 2 = _____ ___ + ___ = 6

Subtracting and Undoing

Finish each set of equations.

9 - 5 = ____	9 - 4 = ____

10 - 7 = ____	10 - 3 = ____

7 - 2 = ____	7 - 5 = ____

10 - 4 = ____	10 - 6 = ____

9 - 8 = ____	

8 - 4 = ____	

6 - 0 = ____	

7 - 4 = ____	

★Write 4 equations using 3 numbers.

3 1 4

3 + 1 = 4

1 + =

4 - 3 =

4 -

5 1 6

5 2 3

4 0 4

★ Write 4 equations using 3 numbers.

6 6 0	2 3 1
________________	________________
________________	________________
________________	________________
________________	________________

Write as many equations as you can.

3 3 6	2 4 2
________________	________________
________________	________________
________________	________________
________________	________________

Partitioning Sets

Number of starting set	Number of each subset	Number of equivalent subsets	Number of remainder set
17	3		
10	4		
6	2		
13	4		
21	3		
15	5		
18	2		
25	5		
21	10		

Counting by Twos

2	4	6		

Counting by Fives

5	10	15		

Count Back by Fives

85	80			

Counting by Tens

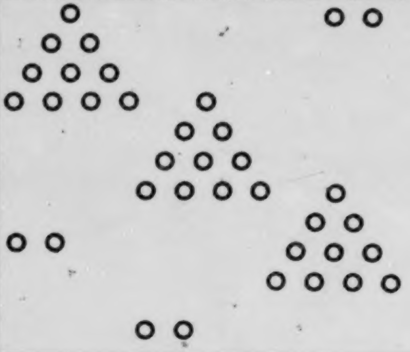
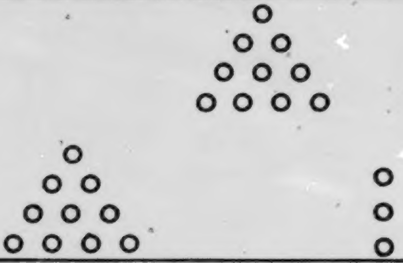
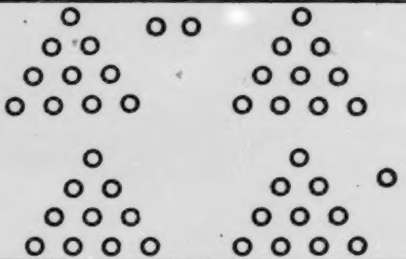
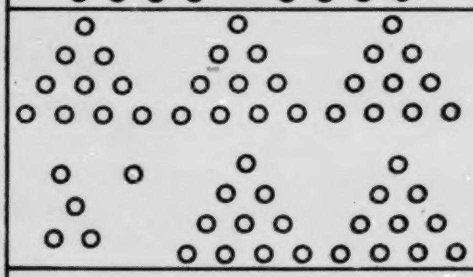
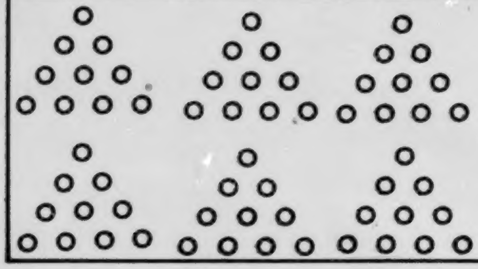
10	20			

5	15			

27	37			

49				

Renaming Numbers
Fill the blanks.

	tens	ones	number names
	3	6	30 + 6 36
	2	3	___ + ___ ___
	___	___	___ + ___ ___
	___	___	___ + ___ ___
	___	___	___ + ___ ___

Renaming Numbers
Fill the blanks.

36 30 + 6 3 tens 6 ones

47 ________________ ___ tens ___ ones

73 ________________ ___ tens ___ ones

61 ________________ ___ tens ___ ones

6 ________________ ___ tens ___ ones

25 ________________ ___ tens ___ ones

99 ________________ ___ tens ___ ones

12 ________________ ___ tens ___ ones

---

84 ________________ ___ ones ___ tens

22 ________________ ___ tens ___ ones

30 ________________ ___ ones ___ tens

75 ________________ ___ tens ___ ones

Renaming Numbers

Fill the blanks.

5 tens 2 ones ------------------- -----

7 tens 0 ones ------------------- -----

4 tens 9 ones ------------------- -----

8 tens 5 ones ------------------- -----

0 tens 4 ones ------------------- -----

3 tens 8 ones ------------------- -----

1 ten 1 one ------------------- -----

6 tens 2 ones ------------------- -----

---

2 tens 6 ones ------------------- -----

9 ones 0 tens ------------------- -----

8 tens 6 ones ------------------- -----

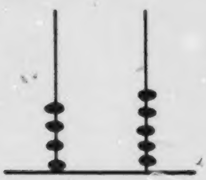
4 tens 0 ones ------------------- -----

Renaming Numbers

Fill in the blanks.

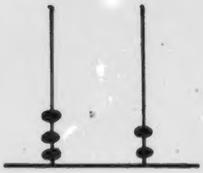
50 + 3	5	tens	3	ones	53
70 + 1	___	tens	___	ones	_____
30 + 5	___	tens	___	ones	_____
20 + 8	___	tens	___	ones	_____
10 + 7	___	tens	___	ones	_____
60 + 5	___	tens	___	ones	_____
30 + 2	___	tens	___	ones	_____
90 + 6	___	tens	___	ones	_____
40 + 4	___	ones	___	tens	_____
70 + 8	___	tens	___	ones	_____
10 + 3	___	ones	___	tens	_____
30 + 5	___	tens	___	ones	_____

Tens and Ones on the Abacus
Fill in the blanks.



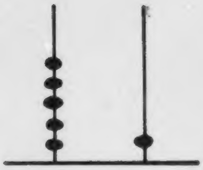
___ tens ___ ones

____



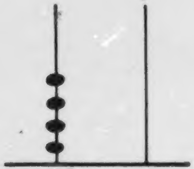
___ tens ___ ones

____



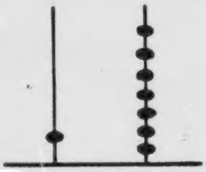
___ tens ___ ones

____



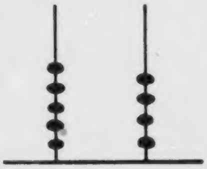
___ tens ___ ones

____



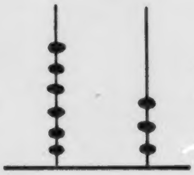
___ tens ___ ones

____



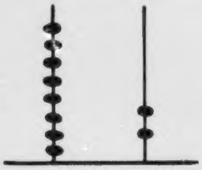
___ tens ___ ones

____



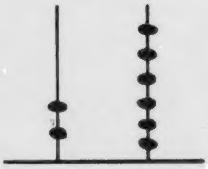
___ tens ___ ones

____



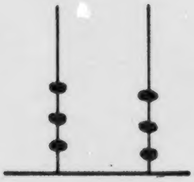
___ tens ___ ones

____



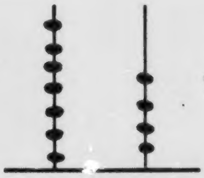
___ tens ___ ones

____



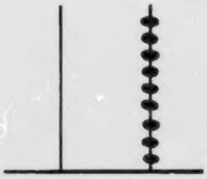
___ tens ___ ones

____



___ tens ___ ones

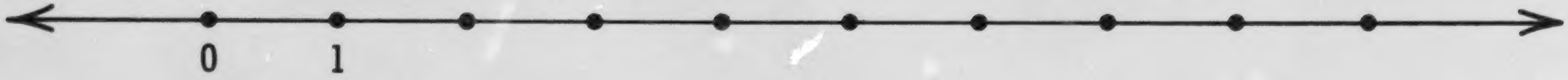
____

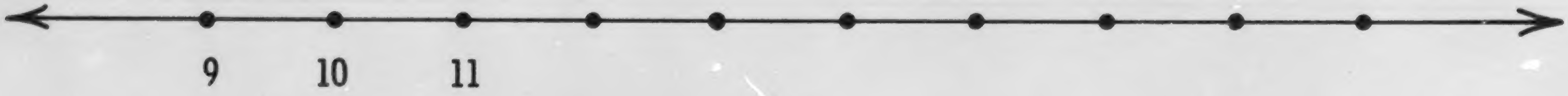


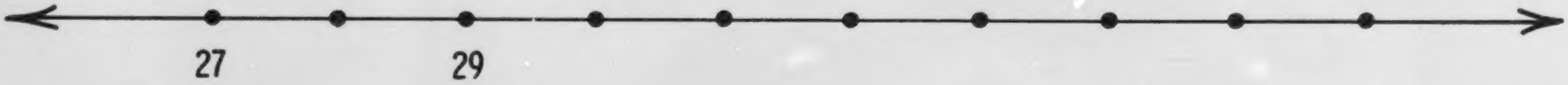
___ tens ___ ones

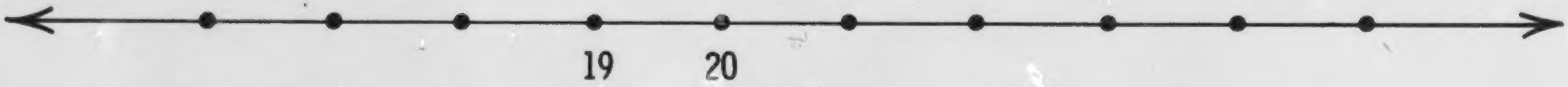
____

The Number Line

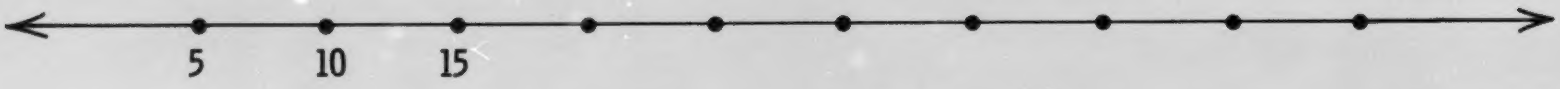


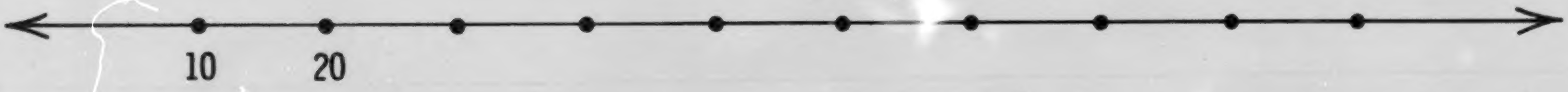


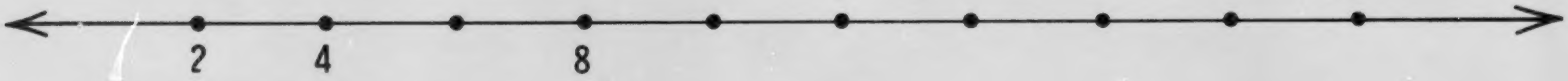


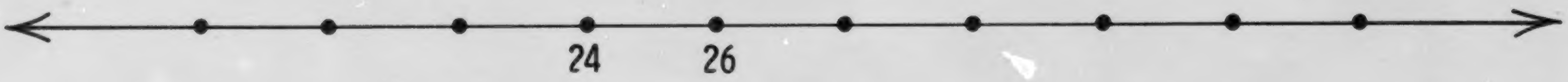


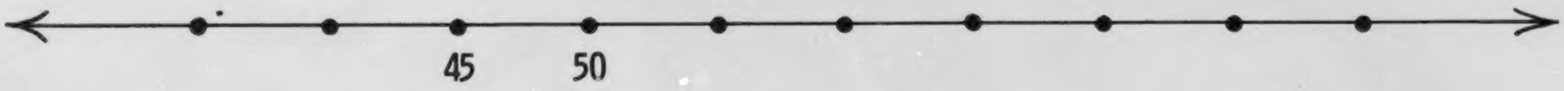
The Number Line





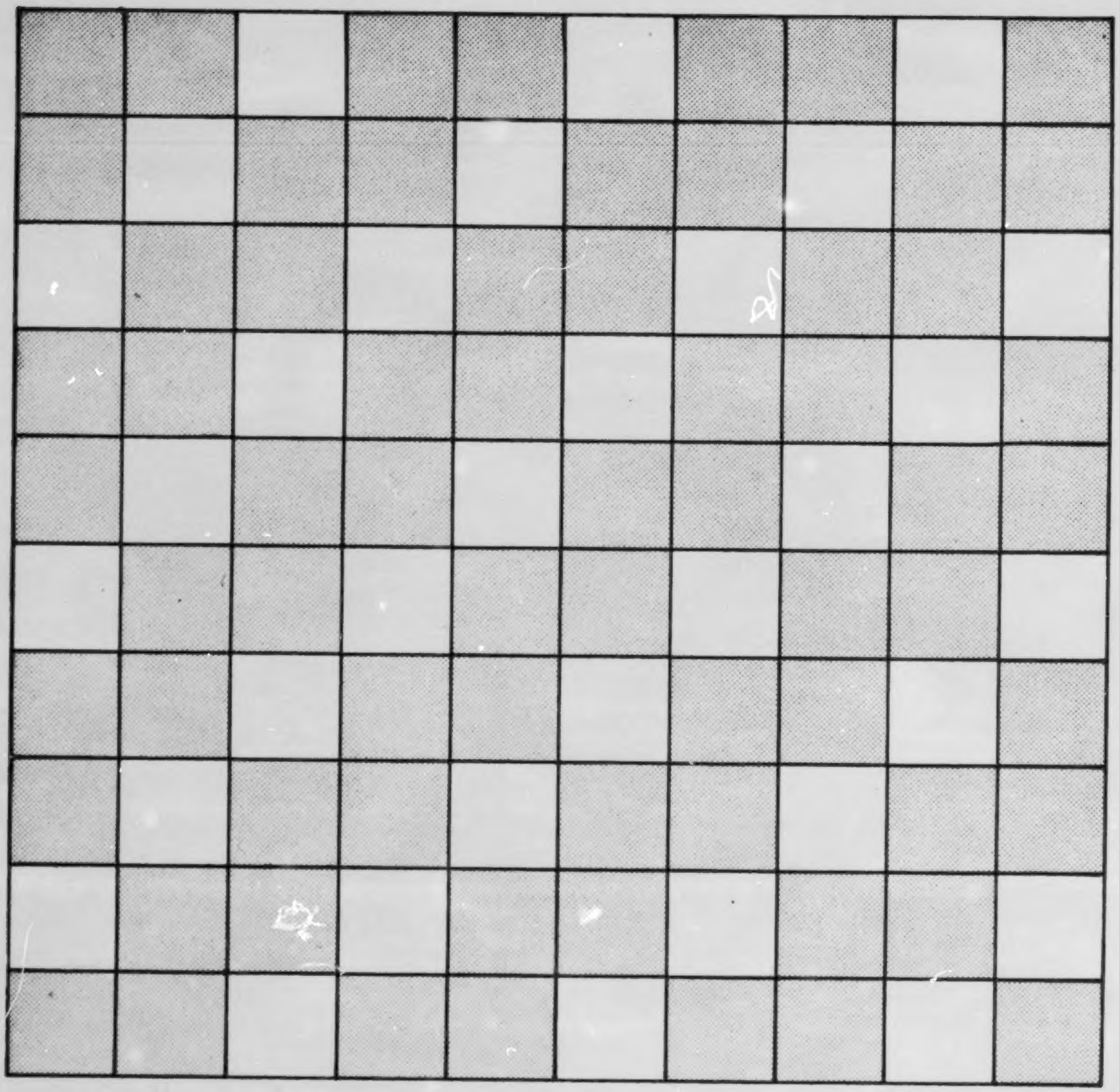




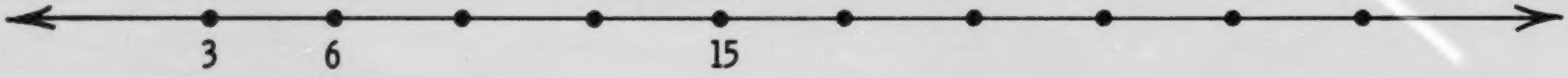


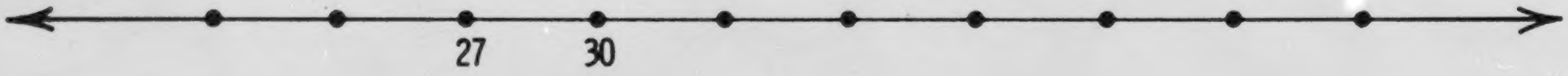
★ **Counting**

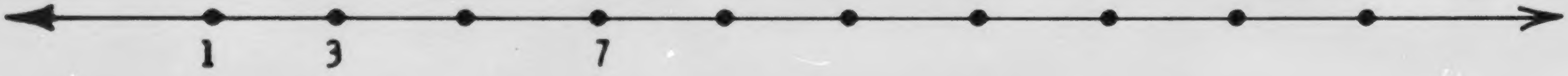
3's

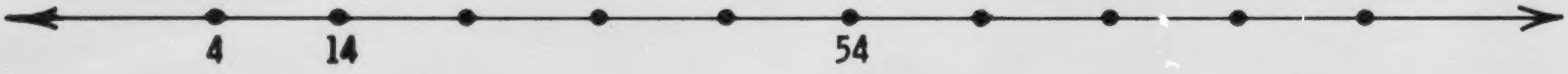


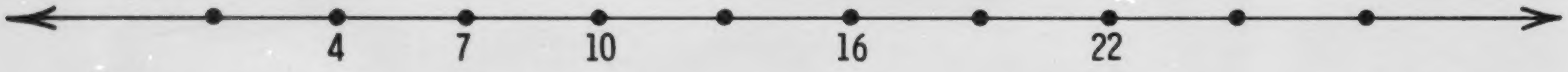
★The Number Line











Order of Numbers

$3 < 1$

$3 > 1$

$5 > 2$

$2 < 5$

$4 < 5$

$5 > 4$

$7 < 9$

$9 < 7$

$7 < 5$

$5 < 7$

$4 > 2$

$2 < 4$

$0 > 6$

$6 > 0$

$2 > 3$

$3 > 2$

Order of Numbers

5 is greater than 1.	$5 > 1$
1 is less than 5.	$1 < 5$
4 is less than 6.	
1 is greater than 0.	
10 is greater than 8.	
2 is less than 5.	
9 is less than 10.	
3 is greater than 1.	
6 is greater than 2.	
7 is less than 9.	
5 is less than 7.	
8 is less than 10.	
2 is greater than 1.	

Order of Numbers

Write > or <

3 2	70 78	34 32
8 9	52 57	60 80
6 3	36 31	21 29
1 5	62 68	12 20
5 2	24 20	69 71
9 4	10 30	81 86
3 8	47 44	58 53
7 1	48 53	61 39

Even Numbers

Fill in the boxes.

0	2	4		
10				
			26	
	42			
		74		
			86	
90				98

Even Numbers

Which even number comes next?

8 10
32 ____
4 ____
46 ____

60 ____
98 ____
22 ____
18 ____

What even number comes before?

12 14
____ 6
____ 30
____ 8

____ 2
____ 94
____ 14
____ 90

Odd Numbers

Fill in the boxes.

1	3	5		
11				
			27	
				39
	53			
		65		
71				
			87	
				99

Odd Numbers

What odd number comes next?

9 ________

13 ________

51 ________

5 ________

39 ________

75 ________

87 ________

91 ________

What odd number comes before?

________ 7

________ 3

________ 29

________ 11

________ 61

________ 45

________ 12

________ 50

Even and Odd Numbers

★ Fill the blanks.

2 + 2 = _____

0 + 8 = _____

4 + 2 = _____

2 + 4 = _____

6 + 0 = _____

4 + 2 = _____

0 + 4 = _____

2 + 0 = _____

All the addends above are even odd.

All the sums are even odd.

---

1 + 3 = _____

1 + 1 = _____

5 + 1 = _____

3 + 1 = _____

1 + 5 = _____

3 + 3 = _____

5 + 3 = _____

5 + 5 = _____

All the addends are even odd.

All the sums are even odd.

★ **Fill the blanks.**

2 + 1 = _____

4 + 1 = _____

0 + 3 = _____

2 + 3 = _____

5 + 0 = _____

3 + 2 = _____

3 + 0 = _____

5 + 2 = _____

---

2 + 2 = _____

4 + 2 = _____

6 + 2 = _____

8 + 2 = _____

10 + 2 = _____

1 + 2 = _____

3 + 2 = _____

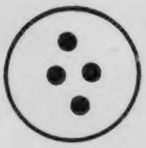
5 + 2 = _____

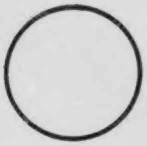
7 + 2 = _____

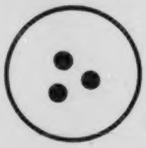
9 + 2 = _____

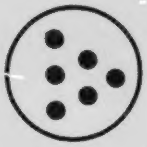
REVIEW EXERCISES FOR CHAPTER I

Show sets. Use X's.

has one more member than 

 has one more member than

has one fewer member than 

has one fewer member than 

Write > or <.

4 6

7 1

15 16

19 52

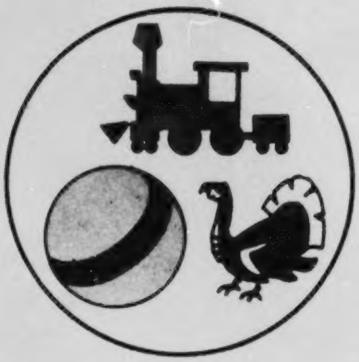
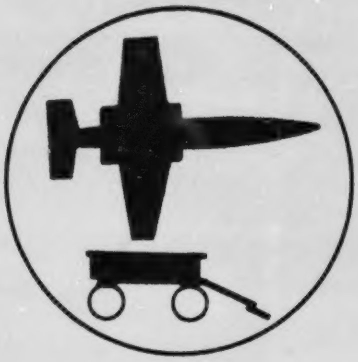
39 24

48 40

90 88

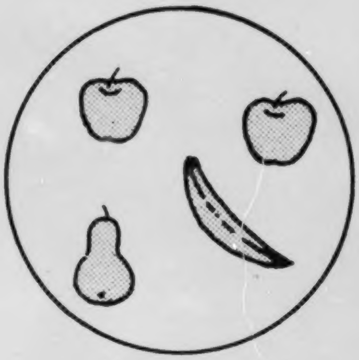
12 21

Addition and Equations

Join  and 

Equations: ____________________

____

Join and 

Equations: ____________________

____

Fill the blanks:

4 + 1 = _____

6 + 0 = _____

2 + 3 = _____

4 + 2 = _____

1 + _____ = 6

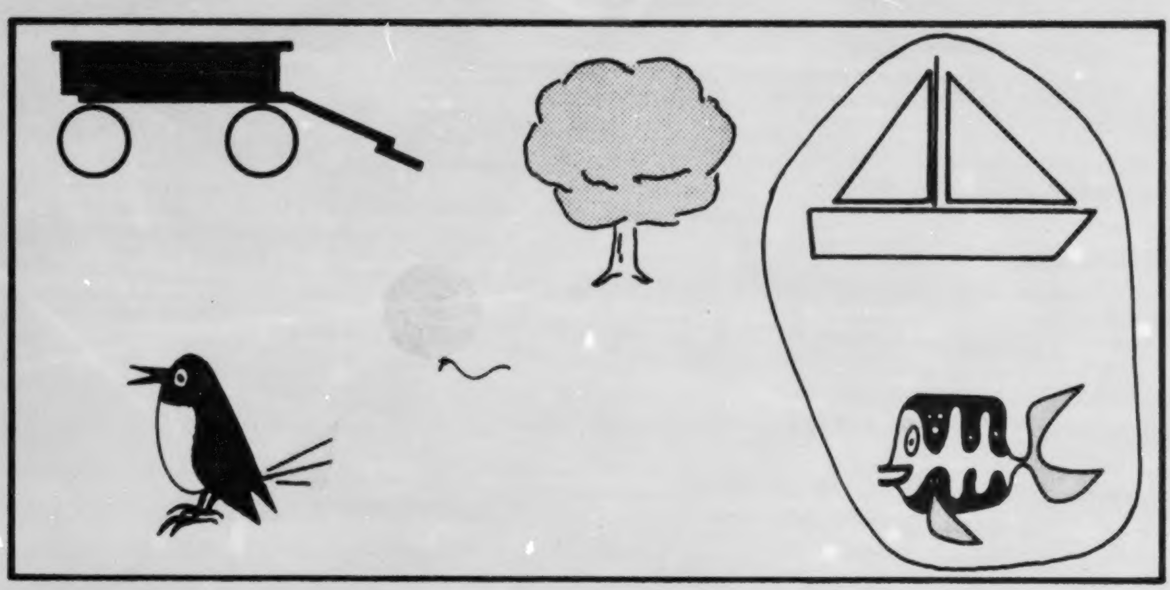
3 + 3 = _____

2 + 4 = _____

_____ + 2 = 5

2 + 2 = _____

Subtraction and Equations



How many are in the starting set? ________________

How many are in the set removed? ________________

How many are in the set remaining? ______________

Equation: ___________________________________

Fill the blanks:

6 - 5 = _____

4 - 2 = _____

5 - 0 = _____

4 - 4 = _____

6 - 2 = _____

3 - 1 = _____

6 - _____ = 2

5 - 3 = _____

5 - 2 = _____

4 - 3 = _____

Fill in the blank in the first equation.

Write an equation to show undoing.

4 + 1 = _____

____

2 + 3 = _____

____

6 - 3 = _____

____

3 + 2 = _____

____

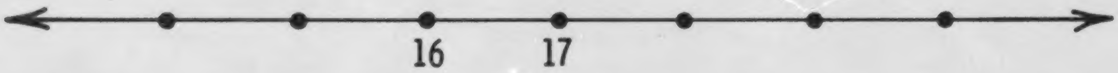
5 - 5 = _____

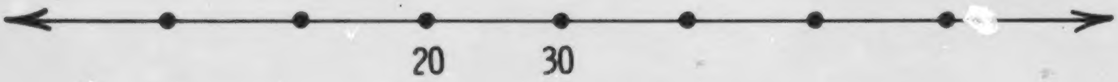
____

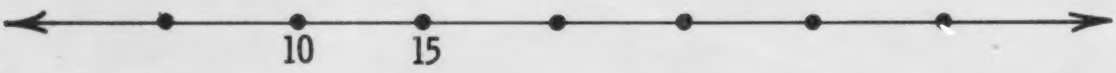
3 - 0 = _____

____

Write the numerals.







Fill the blanks.

6 8 10 _____ _____ _____ ____

_____ 9 11 13 _____ _____ _____

_____ _____ _____ 40 50 60 _____

_____ _____ _____ _____ 35 40 45

Draw rings to show even numbers.

7 36 13 22 15 62

49 28 16 0 57 81

What odd number comes before?

_________ 15 _________ 9 _________ 21

_________ 91 _________ 13 _________ 68

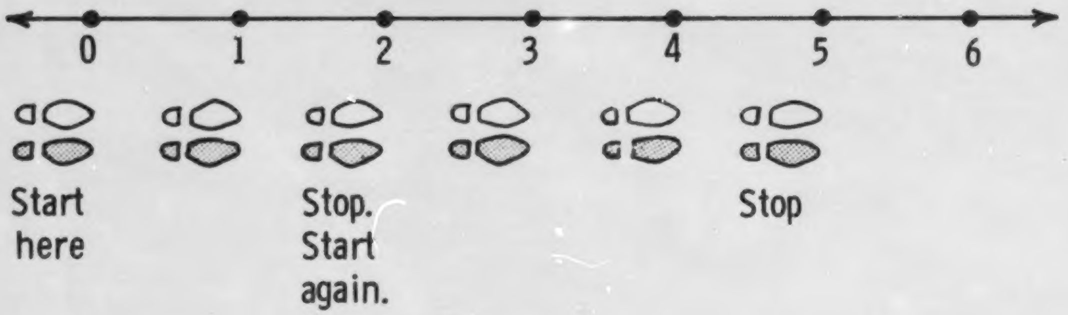
What even number comes after?

26 _________ 38 _________ 98 _________

54 _________ 0 _________ 81 _________

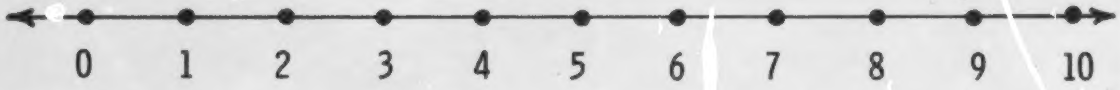
Using a Number Line When Adding

Show a picture of 2 + 3 = 5.


0
1
2
3
4
5
6
Start here
Stop. Start again.
Stop

What point shows the sum of 2 and 3? ____________

Show a picture of 3 + 2 = 5.

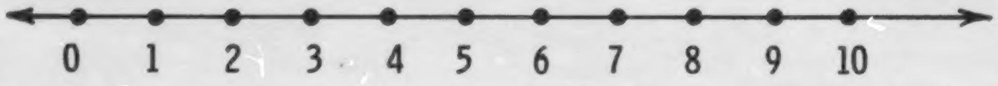

0
1
2
3
4
5
6
7
8
9
10

What is the sum of 3 and 2? ______________

Look at both pictures.

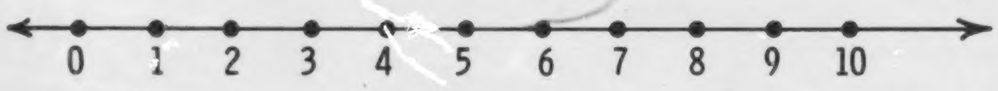
2 + 3 = 3 + __________

Use the number line to show the sum of 6 and 2.


0
1
2
3
4
5
6
7
8
9
10

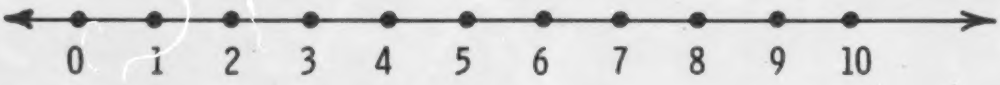
Equation: 6 + 2 = ________________

Use the number line to show the sum of 3 and 7.


0
1
2
3
4
5
6
7
8
9
10

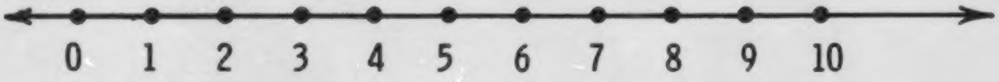
Equation: ________________________

Use the number line to show the sum of 4 and 5.


0
1
2
3
4
5
6
7
8
9
10

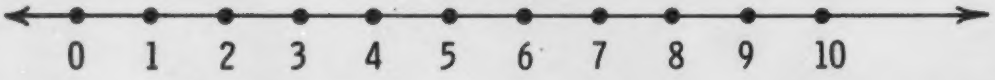
Equation: ________________________

Use the number line to show the sum of 5 and 3.


0
1
2
3
4
5
6
7
8
9
10

Equation: ____________________

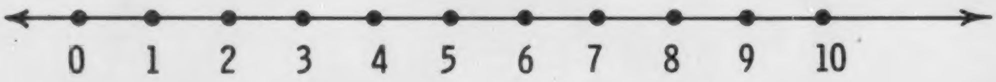
Use the number line to show the sum of 3 and 5.


0
1
2
3
4
5
6
7
8
9
10

Equation: ____________________

5 + 3 = 3 + ____________

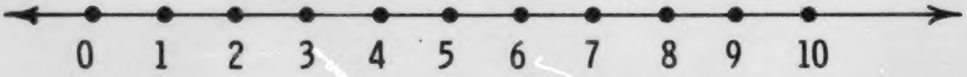
Use the number line to show the sum of 9 and 0.


0
1
2
3
4
5
6
7
8
9
10

Equation: ____________________

What point shows the sum of 9 and 0? ____________

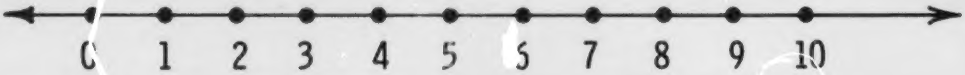
Use the number line to show the sum of 0 and 7.


0
1
2
3
4
5
6
7
8
9
10

Equation: ________________________

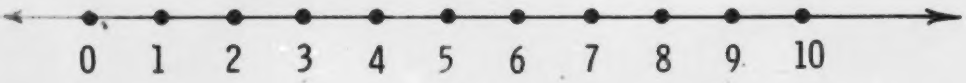
What point shows the sum of 0 and 7? ________________

Use the number line to show the sum of 6 and 1.


0
1
2
3
4
5
6
7
8
9
10

Equation: ________________________

Use the number line to show the sum of 1 and 8.


0
1
2
3
4
5
6
7
8
9
10

Equation: ________________________

Renaming Sums

Fill the blanks.

6 + 0 = _____

6 + 1 = _____

6 + 2 = _____

7 + 0 = _____

7 + 1 = _____

7 + 2 = _____

8 + 0 = _____

8 + 1 = _____

8 + 2 = _____

6 + 0 = _____

6 + 1 = _____

6 + 2 = _____

9 + 0 = _____

9 + 1 = _____

9 + 2 = _____

5 + 0 = _____

5 + 1 = _____

5 + 2 = _____

Fill the blanks:

1 + 8 = _____

0 + 9 = _____

1 + 6 = _____

26 + 1 = _____

0 + 7 = _____

2 + 5 = _____

37 + 0 = _____

59 + 1 = _____

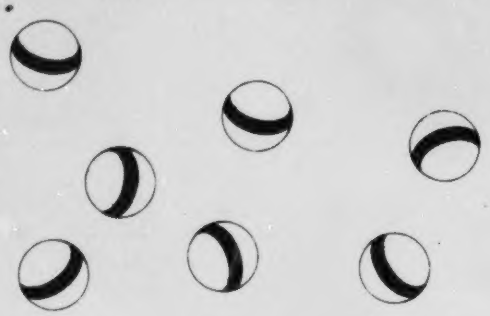
2 + 8 = _____

1 + 9 = _____

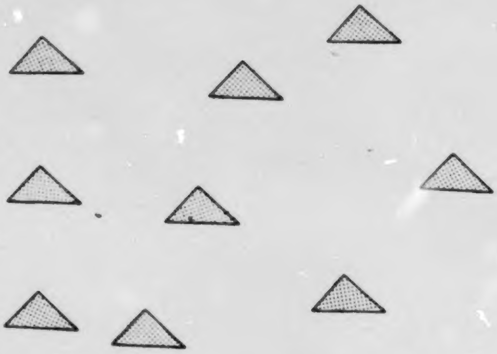
68 + 1 = _____

46 + 2 = _____

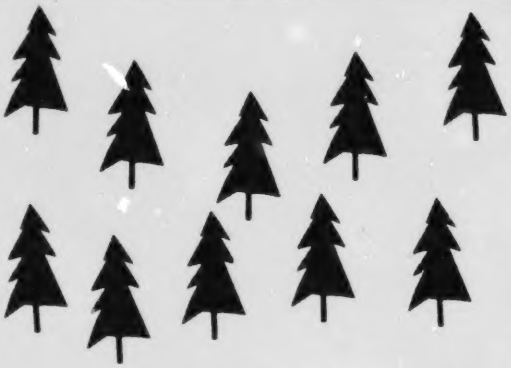
Partitions of Sets



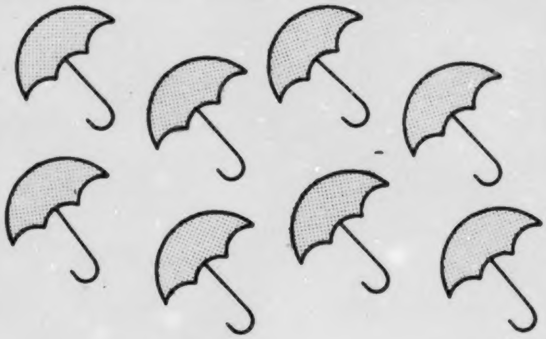
7 = 1 + __6__



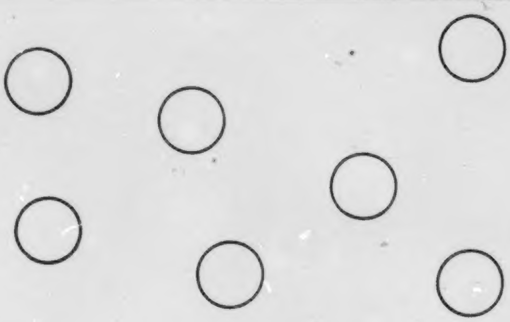
9 = 4 + ________



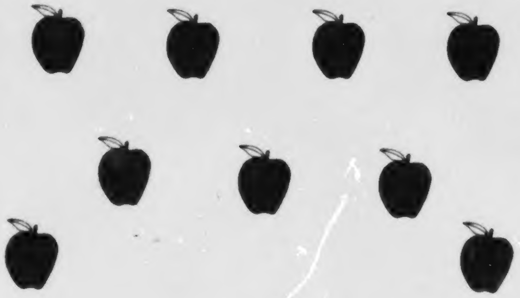
10 = 3 + ________



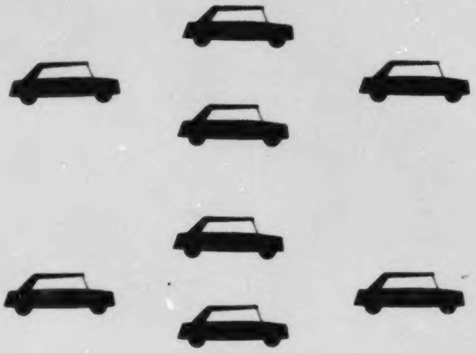
8 = 2 + ________



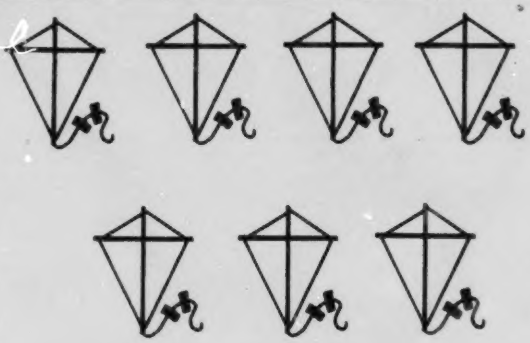
7 = 5 + ________



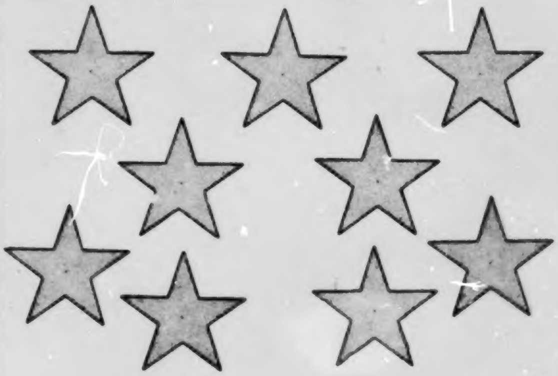
9 = 6 + ________



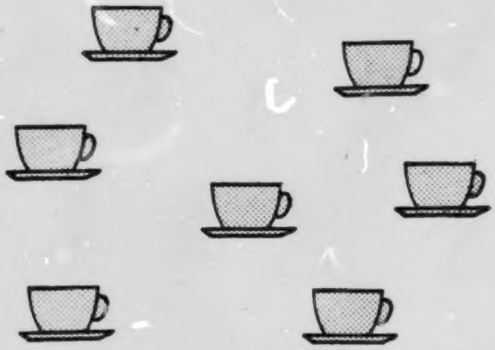
___8___ = 4 + ___4___



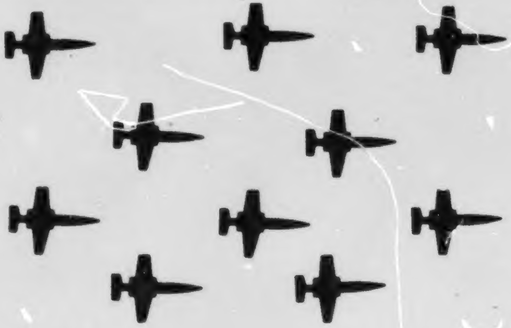
______ = 2 + ________



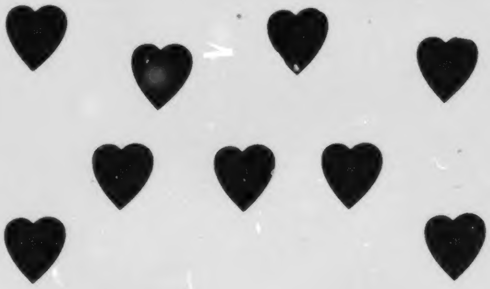
______ = 3 + ________



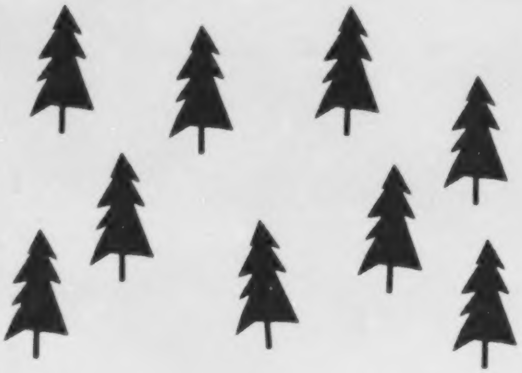
______ = 6 + ________



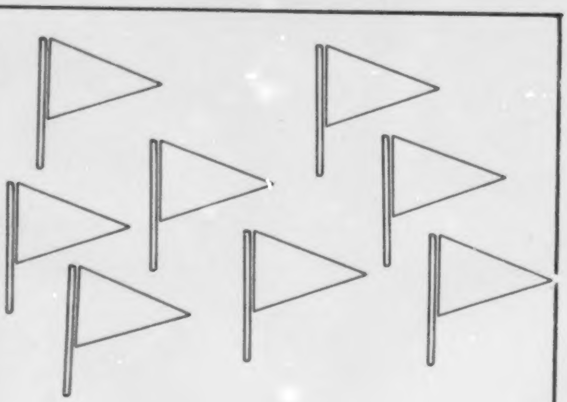
______ = 5 + ________



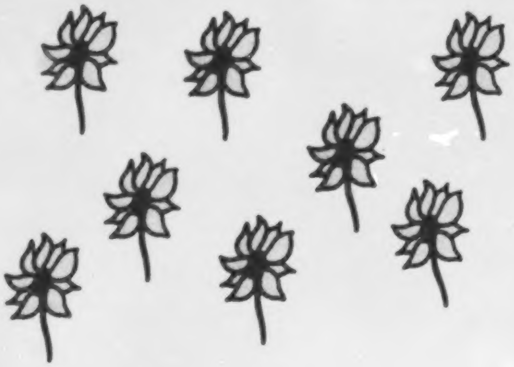
______ = 1 + ________



________ = 4 + ________

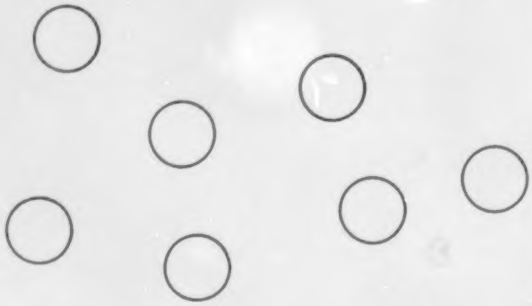


________ = 1 + ________

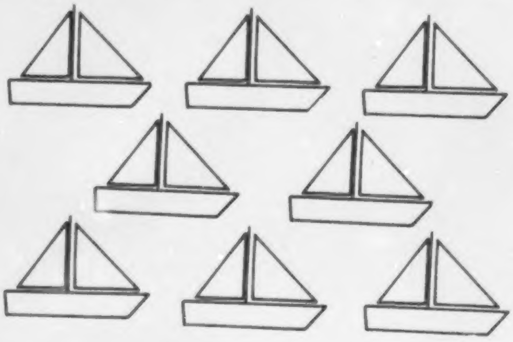


________ = 5 + ________

________ = 7 + ________



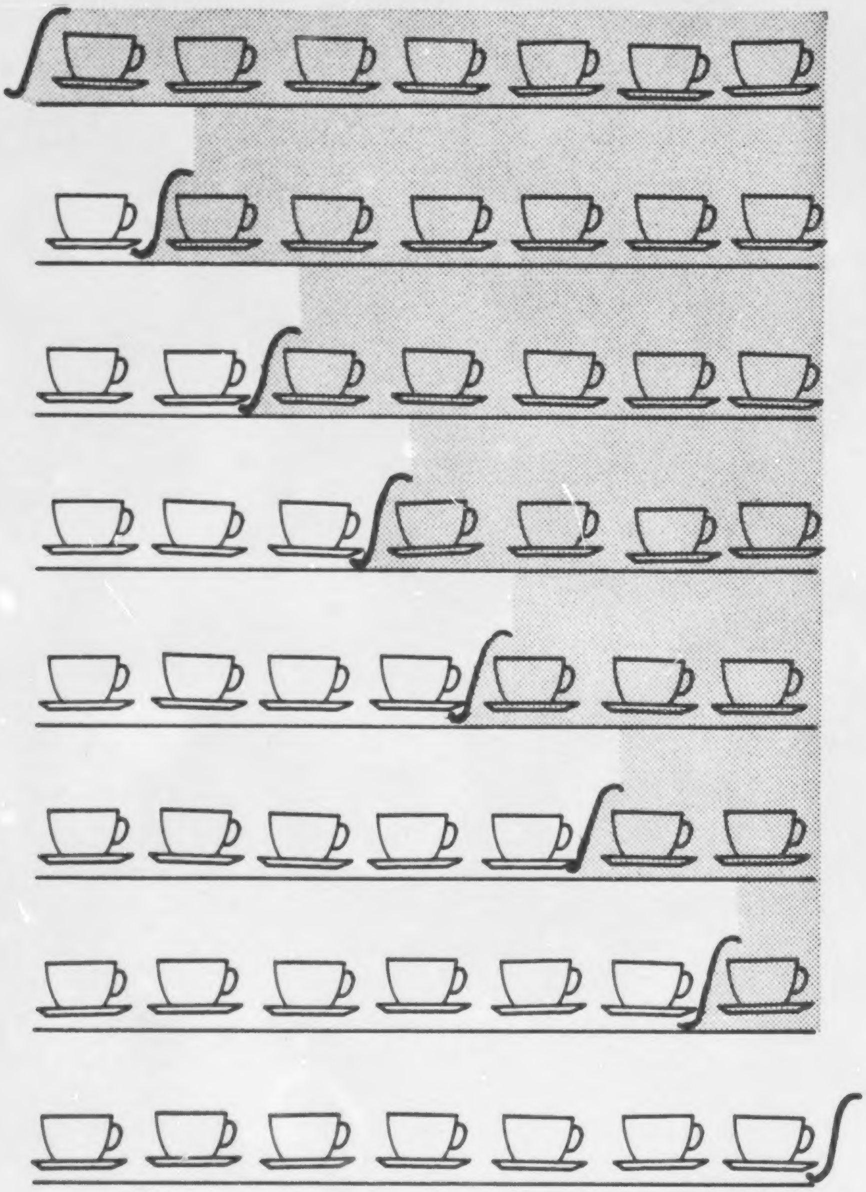
________ = 2 + ________



________ = 6 + ________

Partitions of Sets of Seven

Write about the partitions of the sets of seven pictured below.



7 = 0 + 7

7 = ___ + ___

7 = ___ + ___

7 = ___ + ___

7 = ___ + ___

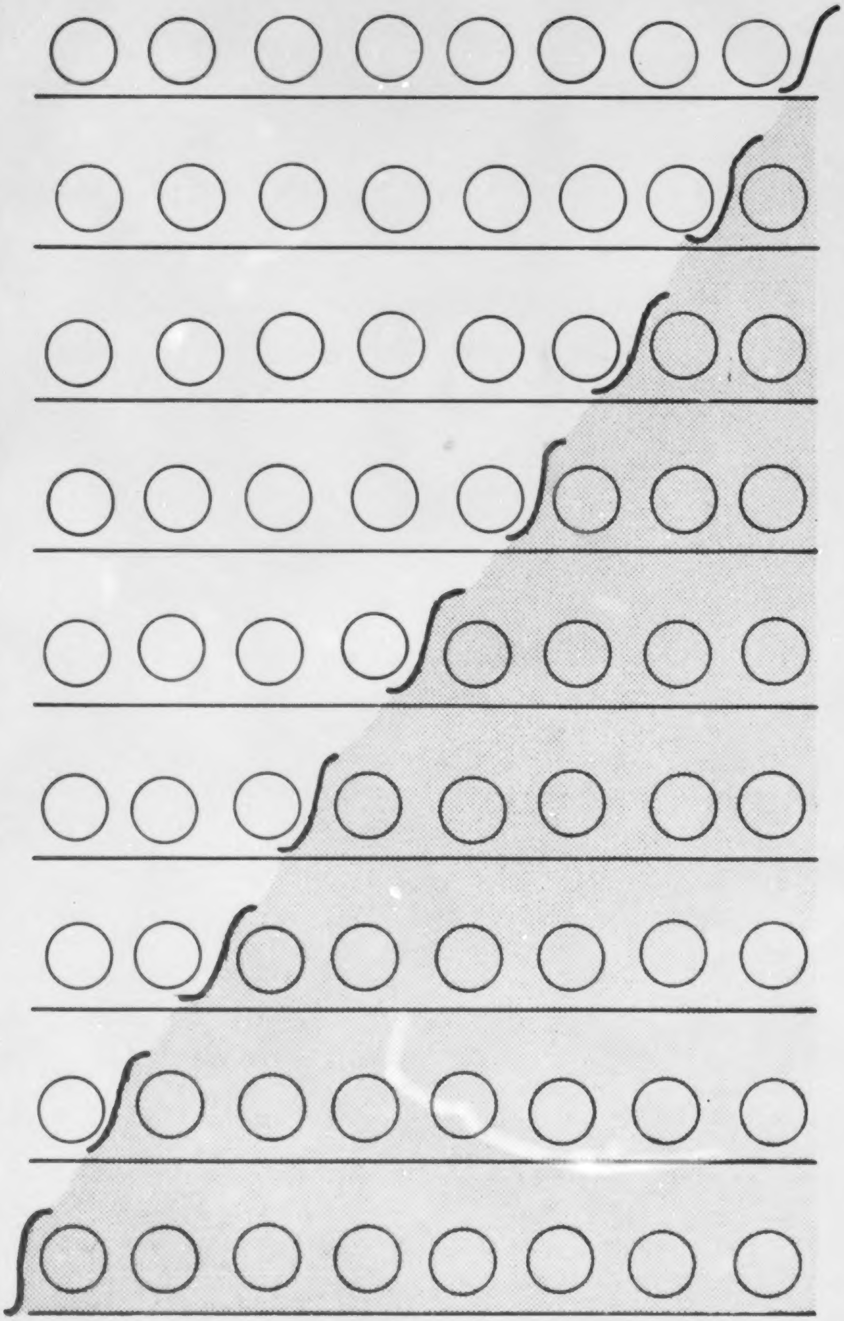
7 = ___ + ___

7 = ___ + ___

7 = ___ + ___

Partitions of Sets of Eight

Write about the partitions of the sets of eight pictured below.



8 = 8 + ___

8 = ___ + ___

8 = ___ + ___

8 = ___ + ___

8 = ___ + ___

8 = ___ + ___

8 = ___ + ___

8 = ___ + ___

8 = ___ + ___

Numbers and Their Sums

Fill in the blanks:

5 + 3 = _____ 3 + 5 = _____	2 + 5 = _____ 5 + 2 = _____	4 + _____ = 7 3 + _____ = 7
8 + 0 = _____ 0 + 8 = _____	6 + 1 = _____ 1 + ___ = ___	5 + 1 = _____ 1 + ___ = ___
1 + 7 = _____ ___________	0 + 7 = _____ ___________	6 + 2 = _____ ___________

Fill in the blanks:

6 + 1 = 7 _____ + 6 = 7	8 = 6 + _____ 8 = _____ + 6	7 = _____ + 5 7 = 5 + _____
7 + _____ = 7 _____ + 7 = 7	7 = 4 + _____ 7 = _____ + 4	6 = _____ + 2 6 = _____ + 4
4 + _____ = 7 3 + _____ = 7	8 = _____ + 5 8 = 5 + _____	7 = 4 + _____ 7 = _____ + 4

Numbers and Their Sums

7
is the sum of

____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____

8
is the sum of

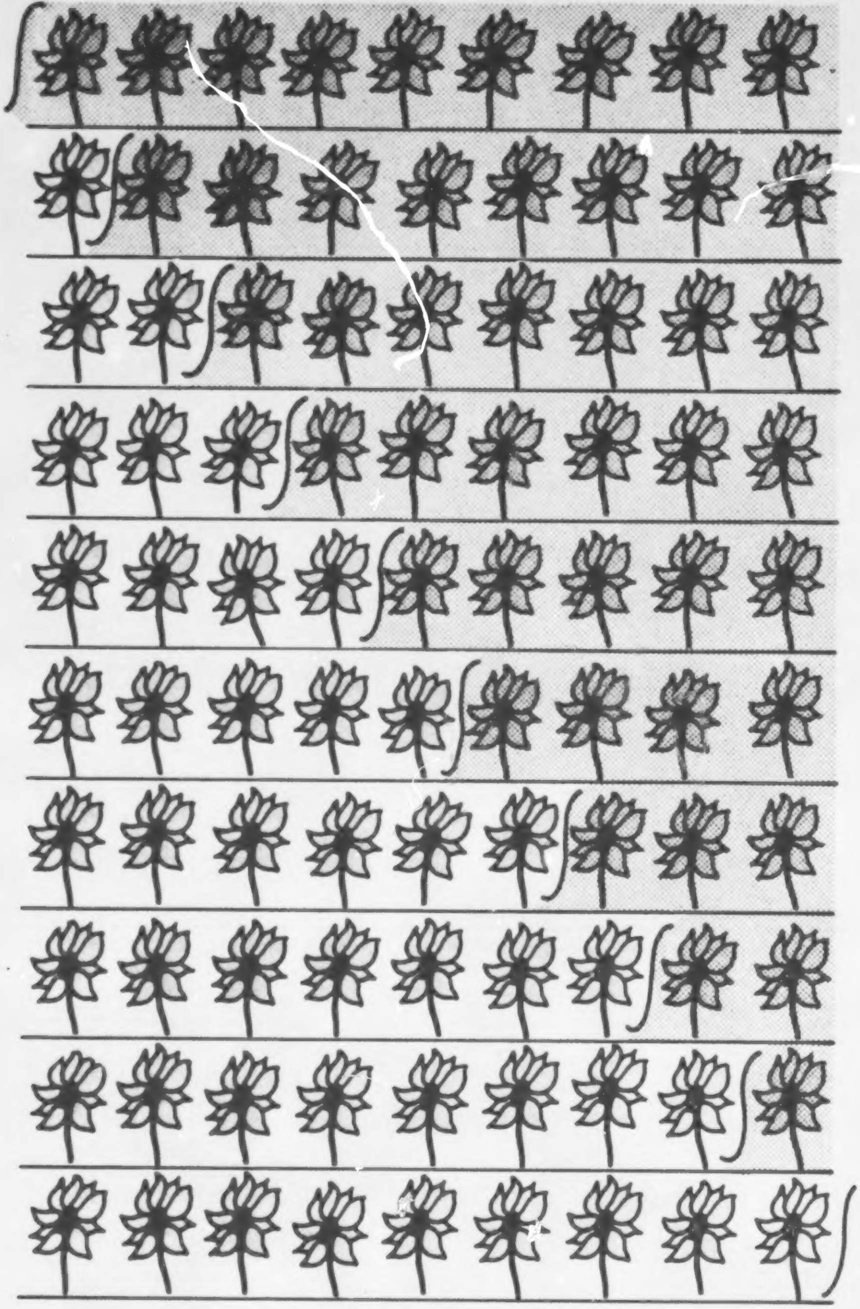
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____

Fill in the blanks:

2 + 4 = _____	0 + _____ = 8	5 + 2 = _____
_____ + 6 = 7	_____ + 3 = 8	1 + _____ = 7
3 + _____ = 7	3 + _____ = 6	4 + _____ = 8
5 + 3 = _____	4 + 3 = _____	_____ + 5 = 8

Partitions of Sets of Nine

Write about the paritions of the sets of nine pictured below.



9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

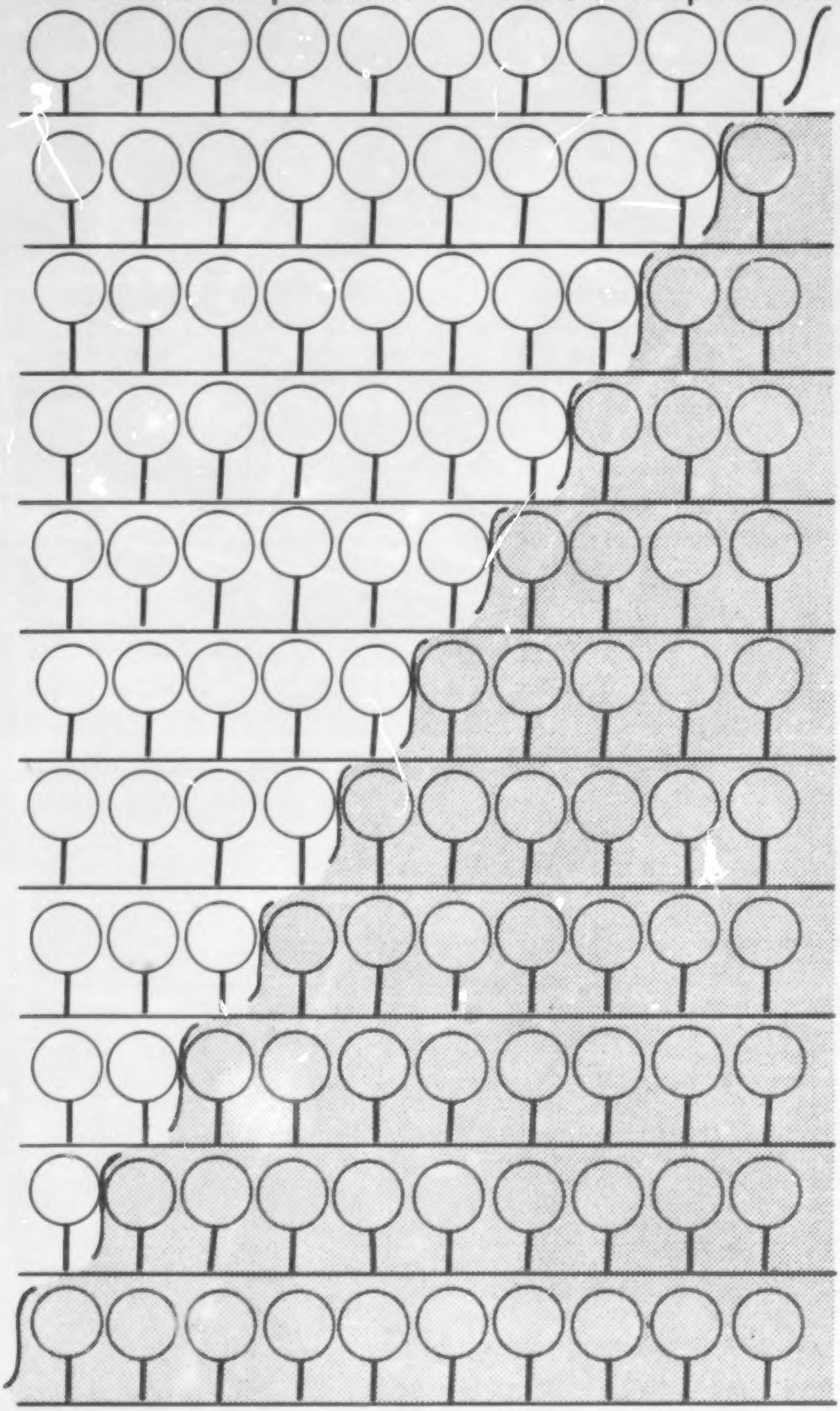
Numbers and Their Sums

Fill in the blanks.

3 + 4 = _____ 7 = 3 + _____	6 + 2 = _____ 8 = 6 + _____	5 + 4 = _____ 9 = 5 + _____
5 + 3 = _____ 3 + _____ = 8	0 + 9 = _____ 9 + _____ = 9	5 + 2 = _____ 2 + _____ = 7
4 + 5 = _____ 9 = 4 + _____	6 + 1 = _____ 7 = 1 + _____	6 + 3 = _____ _____ = 3 + 6
7 + _____ = 7 0 + _____ = 7	2 + _____ = 8 _____ + 6 = 8	4 + _____ = 8 8 = 4 + _____
8 + 0 = _____ 8 = _____ + 0	7 + 2 = _____ 9 = _____ + 7	4 + _____ = 7 7 = _____ + 3

Partitions of Sets of Ten

Write about the partitions of the sets of ten pictured below.



10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

Numbers and Their Sums

9
is the sum of

___ and ___
___ and ___
___ and ___
___ and ___
___ and ___
___ and ___
___ and ___
___ and ___
___ and ___
___ and ___

10
is the sum of

___ and ___
___ and ___
___ and ___
___ and ___
___ and ___
___ and ___
___ and ___
___ and ___
___ and ___
___ and ___
___ and ___

Fill in the blanks:

0 + _____ = 9	6 + _____ = 8	7 + _____ = 10
_____ + 2 = 9	1 + 9 = _____	_____ + 5 = 10
6 + _____ = 10	2 + _____ = 10	_____ + 3 = 9
_____ + 5 = 10	5 + _____ = 9	4 + _____ = 9

Fill the boxes.

+	1
3	4
9	10
17	

+	0
7	
8	
92	

+	2
8	
7	
36	

+	5
3	
5	
4	
2	

+	4
6	
4	
2	
5	

+	6
3	
2	
4	
0	

An Addition Table

Second Number

First Number

+	0	1	2	3	4	5	6
0							
1							
2							
3			5				
4							
5							
6							

What equation goes with the 5 in the table? ____________________

Show: 6 + 3 = 9 in the table.

Show: 1 + 3 = 4 in the table.

Show: 4 + 2 = 6 in the table.

Show: 0 + 5 = 5 in the table.

Now finish the table.

An Addition Table

+	0	1	2	3	4	5	6	7	8	9	10
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											

Fill the boxes in the table for:

2 + 8
2 + 6
2 + 4
2 + 5

3 + 5
3 + 2
3 + 3
3 + 7

4 + 6
4 + 4
4 + 1
4 + 0

5 + 4
5 + 2
5 + 3
5 + 5

0 + 6
8 + 2
7 + 2
6 + 1

Now finish the table.

Using the Addition Table

Use the table on page 68 to help you fill in the blanks.

5 + 4 = _____

3 + _____ = 8

_____ + 7 = 9

6 + 2 = _____

0 + _____ = 9

2 + _____ = 10

9 + 1 = _____

5 + 2 = _____

4 + _____ = 10

3 + _____ = 10

4 + _____ = 9

7 + _____ = 10

_____ + 2 = 10

6 + _____ = 9

5 + 3 = _____

7 + 1 = _____

7 + 2 = _____

0 + _____ = 7

8 + _____ = 10

6 + _____ = 6

3 + _____ = 7

4 + 4 = _____

★ An Addition Table

+	34	35	36	37	38	39	40
34	68	69	70	71	72	73	74
35	69	70	71	72	73	74	75
36	70	71	72	73	74	75	76
37	71	72	73	74	75	76	77
38	72	73	74	75	76	77	78
39	73	74	75	76	77	78	79
40	74	75	76	77	78	79	80

What equations go with the numbers shown by the rings?

____________________ = 71

____________________ = 76

____________________ = 72

____________________ = 73

____________________ = 77

____________________ = 79

Partitions and Subtraction

7
is the sum of

3 and ____

4 and ____

7 and ____

0 and ____

5 and ____

2 and ____

6 and ____

1 and ____

Subtracting from
7

7 - 3 = ____

7 - 4 = ____

7 - 7 = ____

7 - 0 = ____

7 - 5 = ____

7 - 2 = ____

7 - 6 = ____

7 - 1 = ____

6 - 4 = ----- 6 - 2 = -----	7 - 5 = ----- 7 - 2 = -----	5 - 3 = ----- 5 - 2 = -----
7 - 3 = ----- 7 - 4 = -----	5 - 1 = ----- 5 - 4 = -----	7 - 0 = ----- 7 - 7 = -----

Partitions and Subtraction

8
is the sum of

2 and ____

5 and ____

8 and ____

1 and ____

7 and ____

4 and ____

3 and ____

6 and ____

0 and ____

Subtracting from
8

8 - 2 = ____

8 - 5 = ____

8 - 8 = ____

8 - 1 = ____

8 - 7 = ____

8 - 4 = ____

8 - 3 = ____

8 - 6 = ____

8 - 0 = ____

8 = 3 + ----- 8 - 3 = -----	7 = 6 + ----- 7 - 6 = -----	8 = 6 + ----- 8 - 6 = -----
7 = 4 + ----- 7 - 4 = -----	8 = 4 + ----- 8 - 4 = -----	8 = 8 + ----- 8 - 8 = -----

Partitions and Subtraction

9
is the sum of

1 and ____

3 and ____

0 and ____

7 and ____

4 and ____

6 and ____

9 and ____

8 and ____

5 and ____

2 and ____

Subtracting from
9

9 - 1 = ____

9 - 3 = ____

9 - 0 = ____

9 - 7 = ____

9 - 4 = ____

9 - 6 = ____

9 - 9 = ____

9 - 8 = ____

9 - 5 = ____

9 - 2 = ____

9 = 3 + _____ _____ - 3 = 6	8 = 4 + _____ _____ - 4 = 4	9 = 0 + _____ _____ - 0 = 9
9 = 5 + _____ _____ - 5 = 4	9 = 7 + _____ _____ - 7 = 2	8 = 6 + _____ _____ - 6 = 2

Partitions and Subtraction

10
is the sum of

1 and ____

0 and ____

4 and ____

10 and ____

7 and ____

2 and ____

6 and ____

8 and ____

3 and ____

9 and ____

5 and ____

Subtracting from
10

10 - 1 = ____

10 - 0 = ____

10 - 4 = ____

10 - 10 = ____

10 - 7 = ____

10 - 2 = ____

10 - 6 = ____

10 - 8 = ____

10 - 3 = ____

10 - 9 = ____

10 - 5 = ____

More Practice

8 - 1 = _____

4 + 2 = _____

8 - 5 = _____

8 + 0 = _____

7 - 4 = _____

3 + 4 = _____

2 + 7 = _____

10 = _____ + 6

10 = 10 + _____

10 = 7 + _____

9 - 7 = _____

9 - 1 = _____

9 - 4 = _____

7 = 3 + _____

8 = 5 + _____

8 = _____ + 6

4 = 0 + _____

3 = 7 - _____

0 = 5 - _____

5 = 7 - _____

3 + 7 = _____

3 + _____ = 9

_____ - 8 = 2

9 = 5 + _____

9 = _____ + 7

_____ = 8 + 1

Writing Equations

Put in + or - to make equations.

7 3 = 10

10 5 = 5

10 8 = 2

6 4 = 10

1 9 = 10

5 2 = 7

7 0 = 7

3 6 = 9

8 5 = 3

2 7 = 9

Write 4 equations using the numbers:

5, 4, 9

5 + ____ = ____

____ + 5 = ____

____ - 4 = 5

____ - ____ = ____

7, 3, 10

____

____

____

____

3, 5, 8

____

____

____

____

Writing Equations

Fill in the blanks.

3 + _____ = 8 _____ + 3 = 8 8 - 3 = _____	2 + _____ = 9 _____ + 2 = 9 9 - 2 = _____	4 + _____ = 10 _____ + 4 = 10 10 - 4 = _____

6 + _____ = 9 _____ + 6 = 9 9 - 6 = _____	7 + _____ = 10 _____ + 7 = 10 10 - 7 = _____	5 + _____ =7 _____ + 5 = 7 7 - 5 = _____

Write 2 more equations if you need them.

2 + _____ = 8 _____________ _____________	5 + _____ = 10 _____________ _____________	1 + _____ = 9 _____________ _____________

4 + _____ = 7 _____________ _____________	3 + _____ = 10 _____________ _____________	2 + _____ = 10 _____________ _____________

★ Fill in the blanks at the bottom of the page.

Some of the equations at the top of the page can be used to help you.

42 - 16 = 26

16 + 42 = 58

100 + 81 = 181

100 - 81 = 19

119 + 375 = 495

119 + 256 = 375

98 + 56 = 154

98 - 56 = 42

139 - 41 = 98

139 + 41 = 180

432 + 750 = 1182

318 + 432 = 750

79 + 94 = 173

15 + 79 = 94

35 - 26 = 9

26 + 35 = 61

---

56 + _____ = 98

41 + _____ = 139

_____ + 16 = 42

750 - _____ = 432

_____ - 35 = 26

81 + _____ = 100

79 + _____ = 94

375 - _____ = 119

Solving Problems

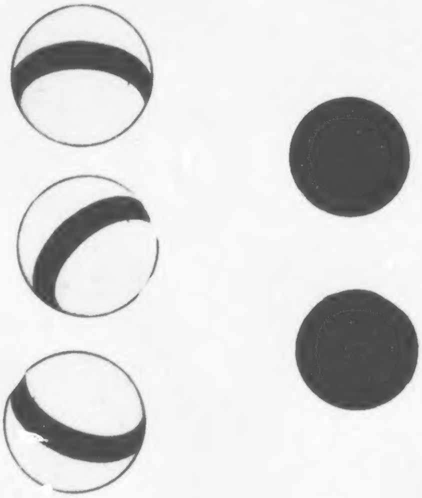
1.

2.

3.

4.

Using Equations



Tom had 3 red balls.

He bought 2 blue balls.

Then how many balls did he have?

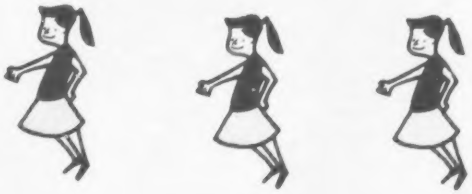
3 + 2 =

Tom had 5 balls.

Susan was playing house.

Betty and Linda came to play with her.

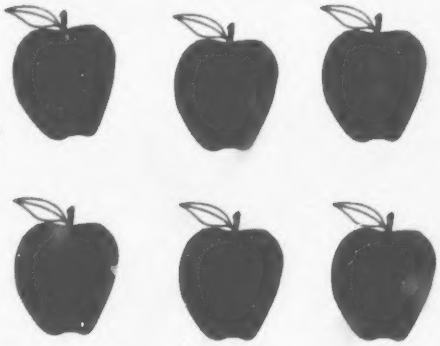
How many girls were playing house?



Six ripe apples were on a tree.

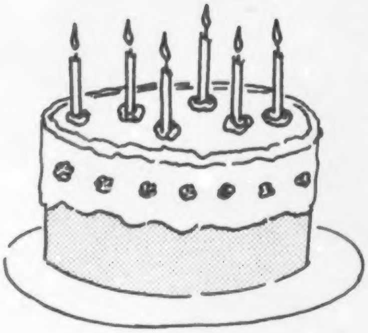
The birds ate two of them.

How many of the apples are still on the tree?

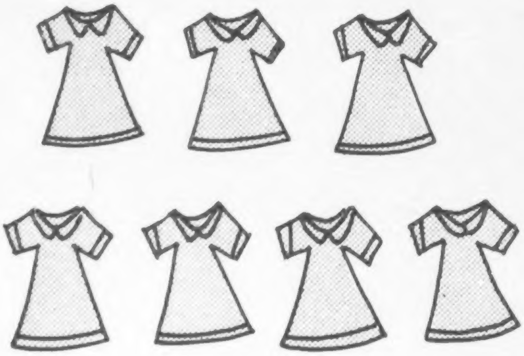


Using Equations

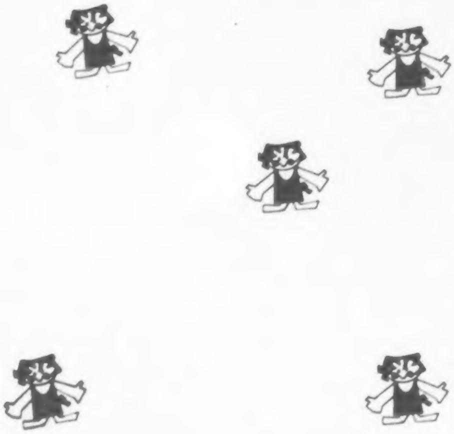
Bill's birthday cake had 6 lighted candles.
Bill blew out 4 of them.
How many candles were burning then?



Judy has 7 dresses.
Only one dress is blue.
How many dresses are not blue?



Beth has 5 dolls.
Jean has 8 dolls.
How many dolls must Beth get to
have as many as Jean?



Solving Problems

Peggy has 3 cookies.
Sarah has 6 cookies.
How many more cookies
does Sarah have than Peggy?

Draw Peggy's cookies.

Draw Sarah's cookies.

____

Sarah has ______ more cookies.

Sue has 9 cents.
John has 5 cents.
How many fewer cents does
John have than Sue?

Draw Sue's cents.

Draw John's cents.

____

John has ______ fewer cents.

Solving Problems

Ellen has 8 jacks.
Beth has 4 jacks.
How many jacks must Beth get
to have as many as Ellen?

Draw Ellen's jacks.

Draw Beth's jacks.

____

Beth must get ________ jacks.

Bill has 9 balls.
John has 3 balls.
How many more balls
does Bill have than John?

Draw Bill's balls.

Draw John's balls.

____

Bill has ________ more balls.

Comparing Numbers

6 > 4 Six is greater than four.

4 < 6 Four is less than six.

Add or subtract. Put in >, < or =.

3 + 2 > 4	6 = 3 + 3	10 - 8 4
6 - 4 1	6 3 + 1	6 + 3 10
3 + 3 7	5 4 + 2	5 7 - 4
2 + 1 0	8 5 + 4	4 9 - 5
4 + 2 5	10 6 + 3	8 5 + 3
2 + 2 6	4 3 + 4	7 + 3 9

Comparing Numbers

7 > 3　　　5 < 9　　　3 + 2 = 4 + 1

Put in <, >, or =.

6 + 1　　1 + 6	6 + 0　　0 + 0	5 + 3　　1 + 7
3 + 4　　2 + 4	7 - 5　　1 + 1	4 + 6　　7 + 2
5 + 2　　7 + 0	3 + 4　　2 + 5	8 - 7　　9 - 9
2 + 2　　3 + 3	7 - 0　　6 - 4	5 + 0　　6 - 3
1 + 5　　6 + 1	6 + 3　　6 - 3	7 + 2　　5 + 3
2 + 3　　5 + 0	4 + 5　　7 + 2	2 + 6　　3 + 7
4 + 3　　1 + 3	10 - 8　　6 + 2	4 + 4　　3 + 5

Comparing Numbers

Put in + or -.

10 - 5 > 6   4

3 + 7 = 8   2

5   4 > 10 - 2

8   4 < 10 - 4

5   3 = 10 - 2

7   3 > 5 + 4

6 - 2 > 10   7

5   5 = 6   6

9   6 > 5 + 4

3 + 6 < 9   1

10   3 < 4   4

9   2 < 6   4

7   2 > 3 + 5

8   1 < 2 + 6

6   1 > 1 + 5

4   3 = 5   2

1 + 9 > 7   3

2 + 8 < 9   2

Adding Three Numbers

Fill in the blanks.

(2 + 4) + 1 = 6 + 1 = 7	(4 + 5) + 1 = ____ + 1 = ____
(3 + 1) + 2 = ____ + 2 = ____	2 + (4 + 1) = 2 + ____ = ____
4 + (5 + 1) = 4 + ____ = ____	5 + (3 + 2) = 5 + ____ = ____
2 + (4 + 4) = 2 + ____ = ____	3 + (4 + 2) = 3 + ____ = ____
(5 + 3) + 2 = ____ + 2 = ____	(1 + 7) + 2 = ____ + 2 = ____

Adding Three Numbers

Use ( ). Fill in the blanks.

(3 + 4) + 2 = 7 + 2
= 9

2 + 5 + 3 = 2 + _____
= _____

2 + 1 + 6 = _____ + 6
= _____

5 + 1 + 3 = _____ + 3
= _____

5 + 1 + 3 = 5 + _____
= _____

1 + 7 + 2 = _____ + 2
= _____

2 + 5 + 3 = _____ + 3
= _____

3 + 4 + 2 = 3 + _____
= _____

1 + 7 + 2 = 1 + _____
= _____

2 + 1 + 6 = 2 + _____
= _____

Adding Three Numbers

Find the sums. Start at the top. Write your answer.

3	6	4	7	3	3
5	1	1	1	7	5
1	2	5	2	0	2
9					

2	1	3	2	8	4
4	7	2	4	1	5
3	2	4	4	1	1

3	2	2	1	2	1
3	7	3	6	2	4
3	1	5	3	3	3

Think about the sums again.

Start at the bottom this time.

Solving Problems

Write the equation on the dark line.

Write the answer on the dotted lines.

1. Mary saw 4 cookies on a plate.
   Her mother said that there should be
   9 cookies on the plate.
   How many more cookies must Mary get?

2. Linda and Betty have 8 dolls.
   Linda has 5 dolls.
   How many dolls does Betty have?

3. There are 6 pencils on the desk.
   Ann's teacher needs 10 pencils.
   How many more should Ann get for her?

Solving Problems

4. Joe saw a kite in a toy store.

   The kite cost 10 cents.

   Joe has only 3 cents.

   How much more money does he need to buy the kite?

5. There are 7 reading books and 2 science books on the table.

   How many reading and science books are on the table?

6. Pat saw 10 airplanes on the ground at the airport.

   Eight of these airplanes took off.

   How many of these airplanes were still on the ground?

Problem Solving

7. Tom had 7 lighted candles on
his birthday cake. ____________________
He blew out 7 of them.
How many of the candles on his
birthday cake were still lighted?

8. There were 8 children playing tag.
Four of them were girls. ____________________
How many were boys?

9. Sue picked 8 flowers from the garden.
Mother wants 10 flowers. ____________________
How many more flowers must Sue pick
for Mother?

Problem Solving

Complete the sentence.

1. Dick had 7 balls.
   He gave some of his balls to Sam.
   How many balls did Dick have then?

I could tell if I knew how many balls ______________________________.

2. Mother gave 3 cookies to Bob.
   She gave some cookies to Sue.
   How many cookies did Bob and Sue have?

I could tell if I knew how many cookies ___________________________.

3. Sally has 2 doll dresses.
   Peggy has 4 doll dresses.
   How many doll dresses do Sally and Beth have all together?

I could tell if I knew how many doll dresses ________________________.

4. Joe saw some ducks on a pond.
   Three of these ducks flew away.
   Then how many of these ducks were on the pond?

I could tell if I knew how many ducks _____________________________.

Solving Problems

Draw lines under the facts you use to solve the problem.

Father has 4 hats.
He has 3 coats.
Father has 1 brown hat.
His other hats are black.
How many black hats does Father have?

____

Father has
__________ black hats.

Jimmy has some new books.
Father gave 3 of these books to Jimmy.
Mother gave 4 cars to Jimmy.
Grandmother gave 4 of these books to Jimmy.
How many books does Jimmy have?

____

Jimmy has
__________ new books.

Jane has 6 candy canes.
She has 4 candy suckers.
She gives 3 of the canes to David.
She gives 2 of the suckers to David.
How many canes does Jane have now?

____

Jane has
__________ candy canes.

Four little boys went swimming.
Two mothers went swimming.
Three fathers went swimming.
Five little girls went swimming.
How many children went swimming?

____

__________ children
are swimming.

Points

1. Name the points A, B, and C.

2. Name the points.

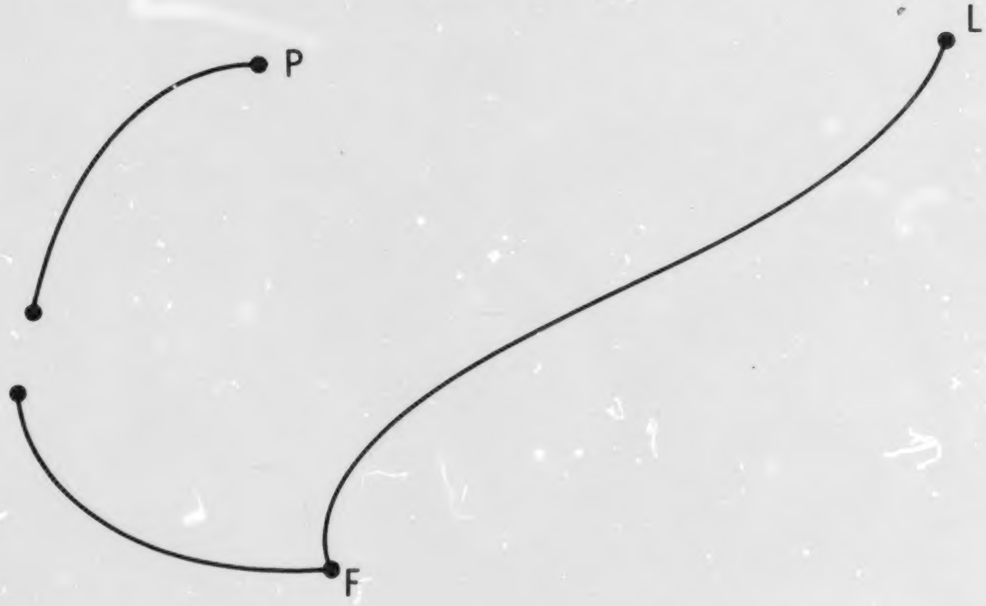
Put a ring around the answer:

Is there a curve shown going from F to L? Yes No

Is there a curve shown going from F to P? Yes No

Mark another point on the curve from F to L. Name it H.

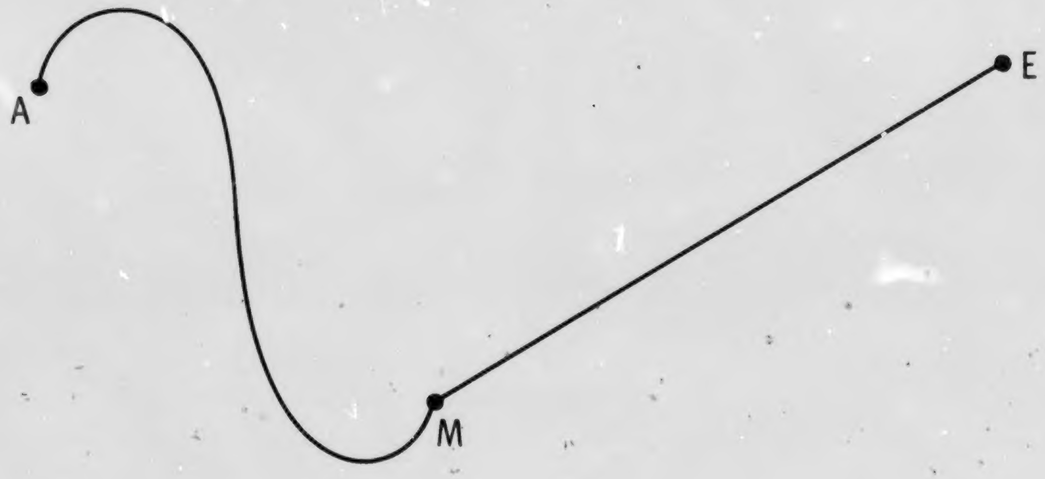
Draw a curve from P to H.



Curves and Line Segments

Is there a curve shown going from A to M? Yes No

Is there a curve shown going from M to E? Yes No



Is there a line segment shown going from M to E? Yes No

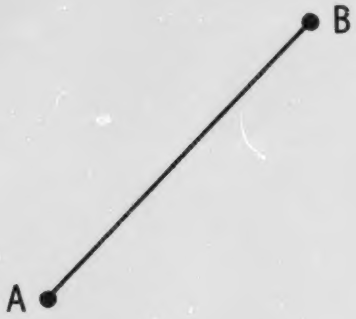
Name its endpoints. ________ ________

Is there a line segment shown going from A to M? Yes No

108

Line Segments

1. Here is a picture of a line segment.



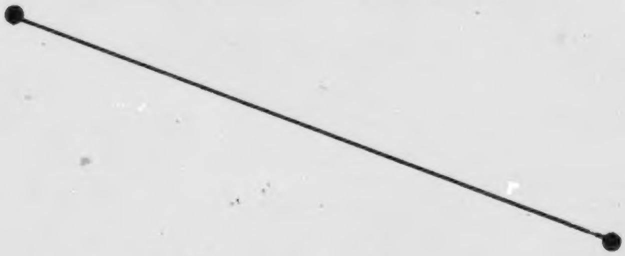
One name for this line segment is ______________________.

Another name for the line segment is ______________________.

2. Here is another line segment.

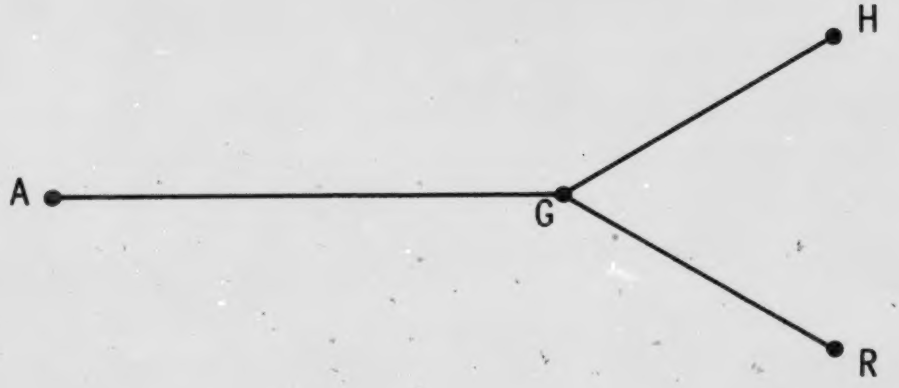
Name one endpoint C.

Name the other endpoint D.



Write two names for this line segment. __________ __________

3. Here are some line segments that have G as an endpoint.



Name three different line segments shown.

__________ __________ __________

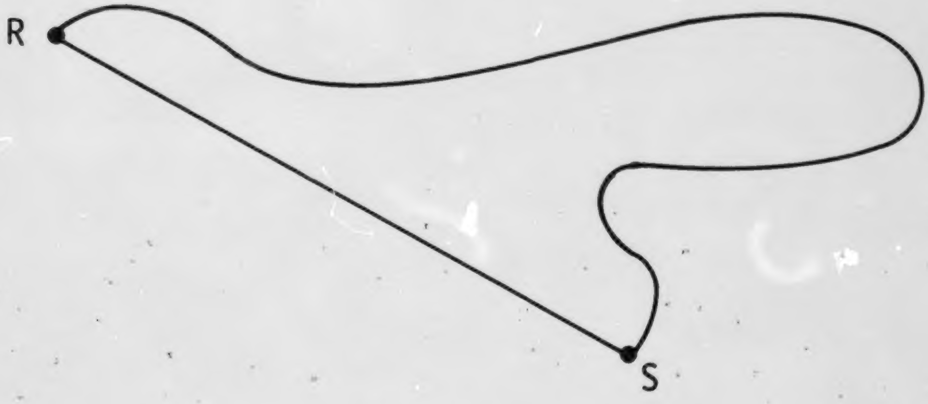
Line Segments

Is there a line segment shown with endpoints R and S? Yes No

Write two names for this line segment. ________ ________

Can there be another line segment with endpoints R and S?

Yes No



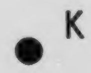
Mark another point on $\overline{RS}$. Name it B.

Is the line segment $\overline{RB}$ shown? Yes No

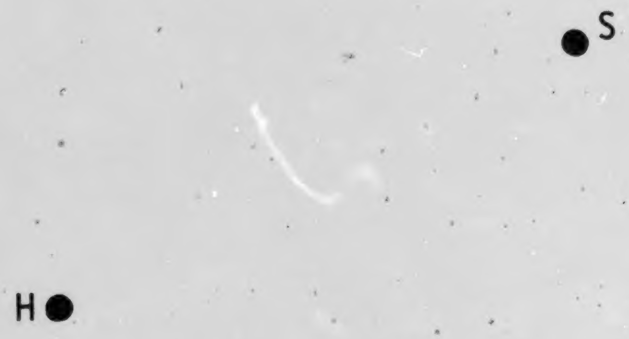
Is the line segment $\overline{SB}$ shown? Yes No

Lines

1. Draw four different lines through the point K.



2. Draw a line through the points H and S.

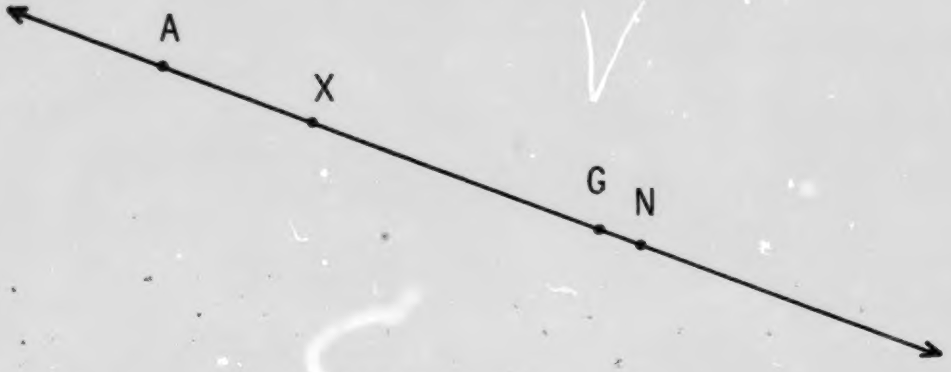


Name this line ________________

Could you draw a different line through H and S? Yes No

3. Line $\overleftrightarrow{AG}$ is shown below.

Write four more names for this line. ______ ______ ______ ______



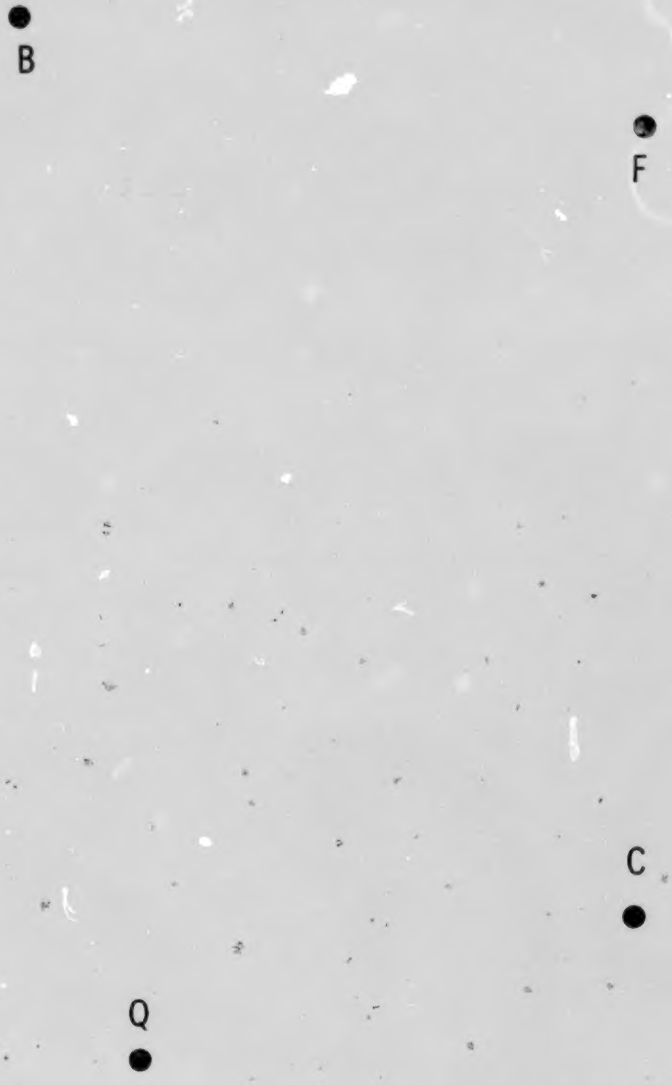
Is line segment $\overline{AG}$ part of line $\overleftrightarrow{AG}$? Yes No

Is $\overline{AG}$ part of $\overline{XN}$? Yes No

Is $\overline{AG}$ part of $\overleftrightarrow{XN}$? Yes No

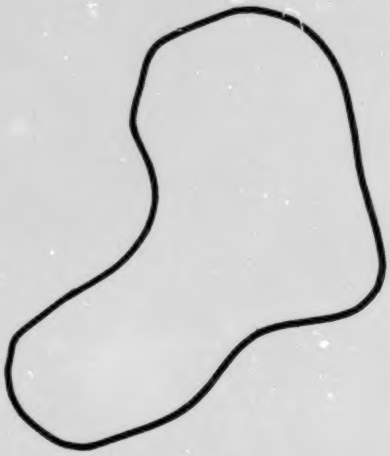
4. Draw line segments $\overline{BF}$ and $\overline{CQ}$.

Do they cross each other? Yes No

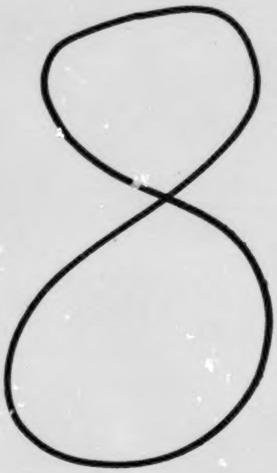


Do the lines $\overleftrightarrow{BF}$ and $\overleftrightarrow{CQ}$ cross each other? Yes No

Closed Curves



A simple closed curve



A closed curve but not a simple closed curve

1. Draw a simple closed curve.

2. Draw a closed curve that is not a simple closed curve.

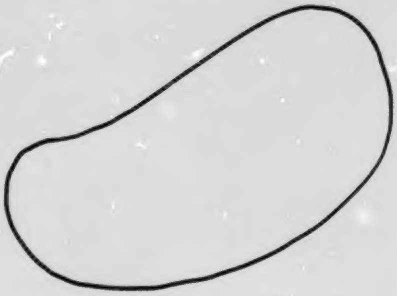
Closed Curves

With a red crayon, trace each simple closed curve.

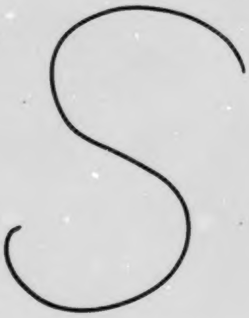
With a blue crayon, trace each closed curve that is not a simple closed curve.

With a green crayon, trace each curve that is not closed.

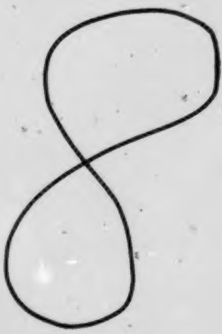
1.



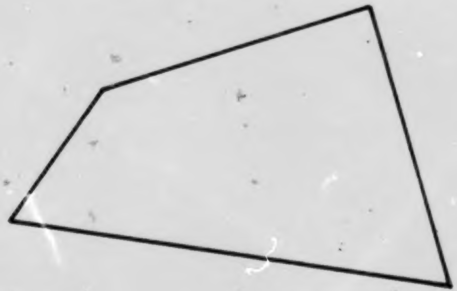
2.



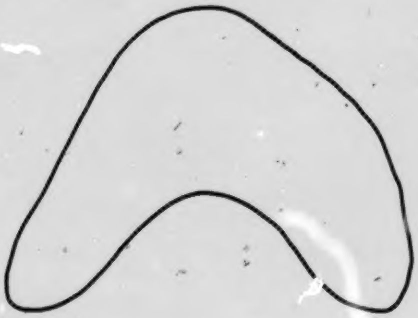
3.



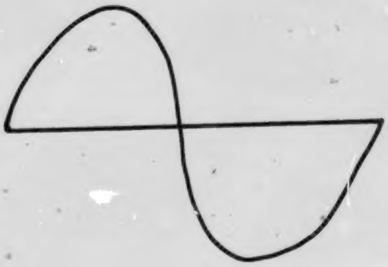
4.



5.



6.

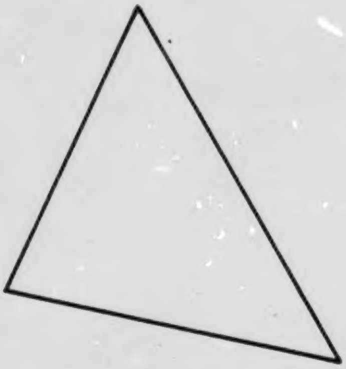


Closed Curves

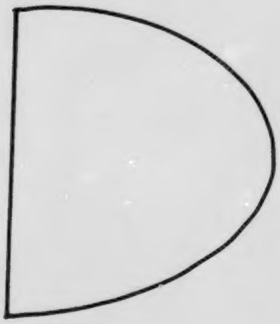
With a red crayon, trace each polygon.

With a blue crayon, trace each simple closed curve that is not a polygon.

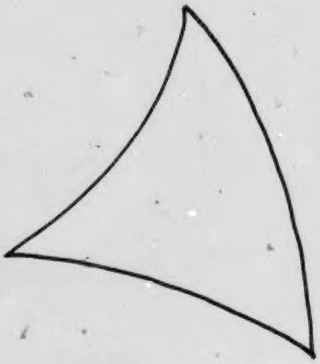
1.



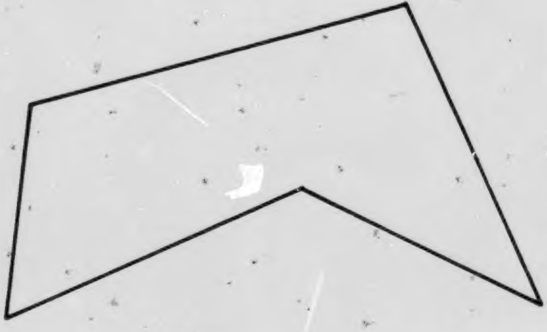
2.



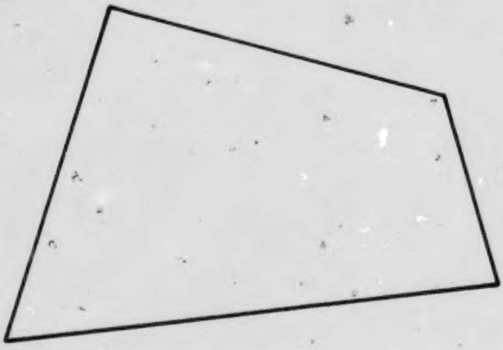
3.



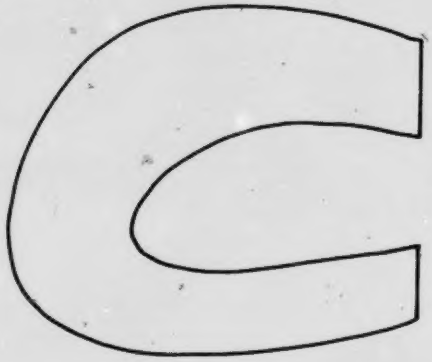
4.



5.



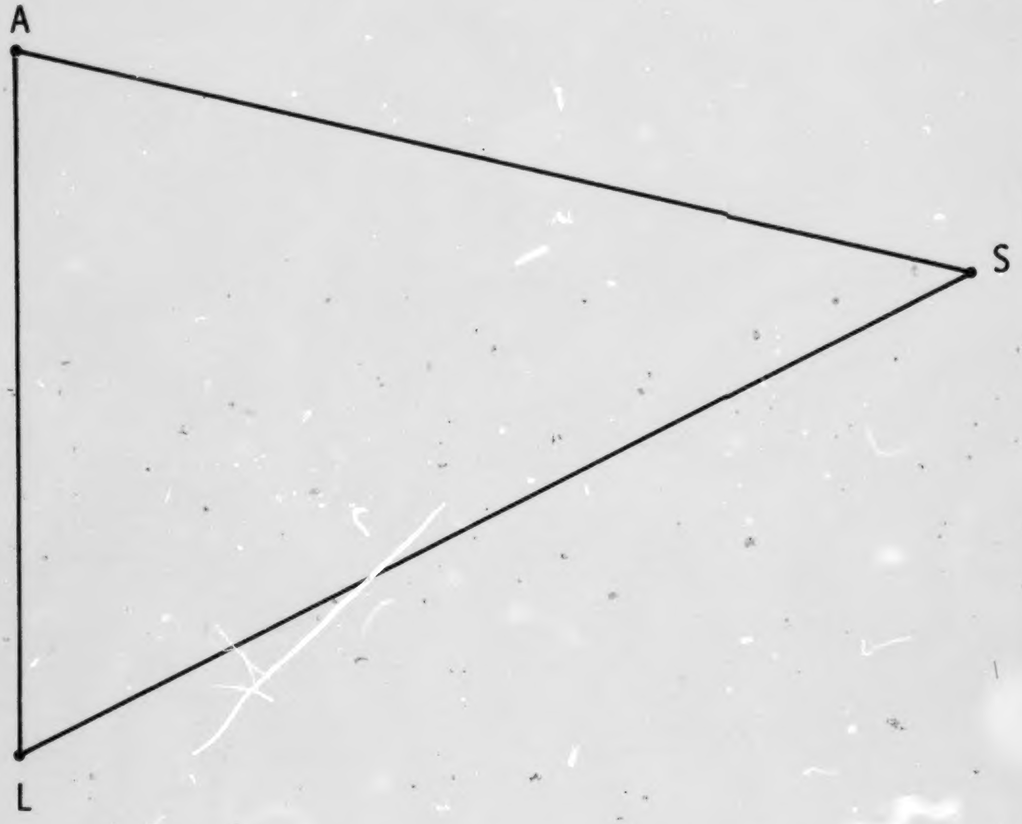
6.



1. Here is a triangle, $\triangle ASL$.

   One vertex is A.

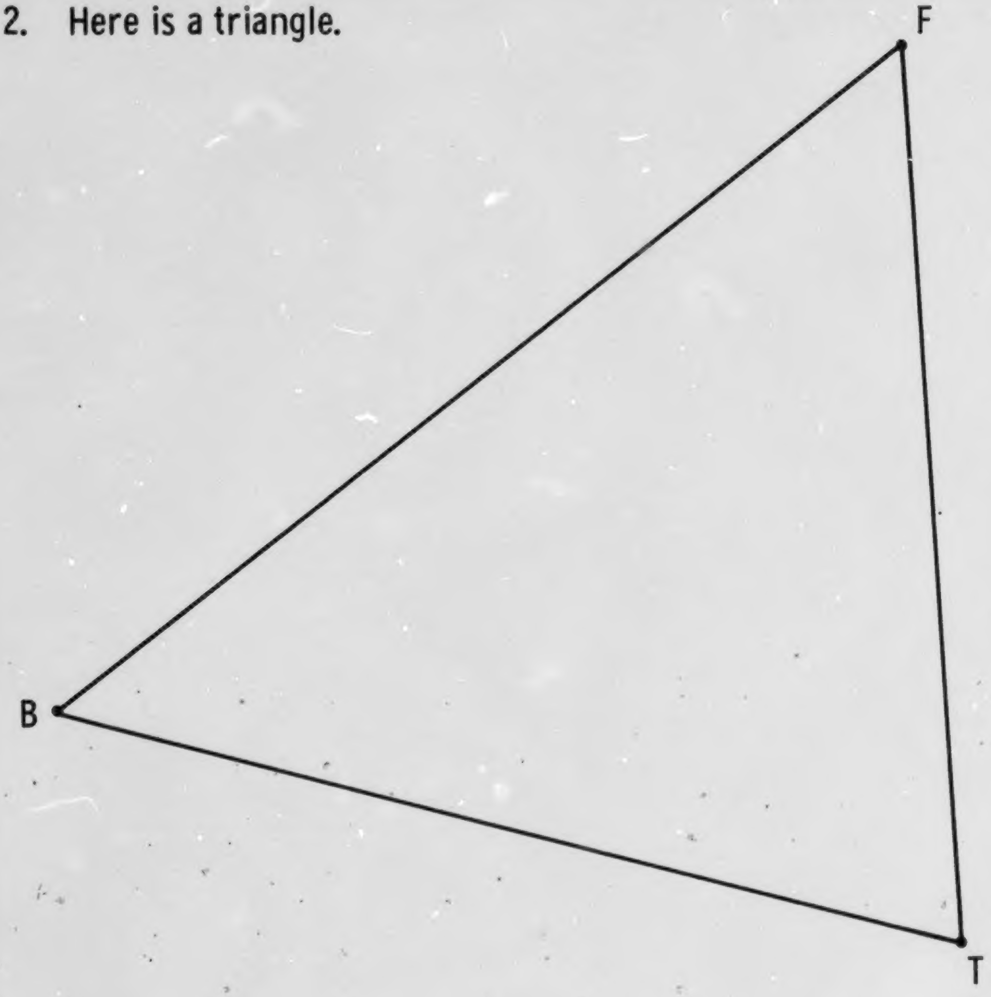
   One side is $\overline{AS}$.



The vertices are ___A___, ______, ______

The sides are ___$\overline{AS}$___, ______, ______

2. Here is a triangle.



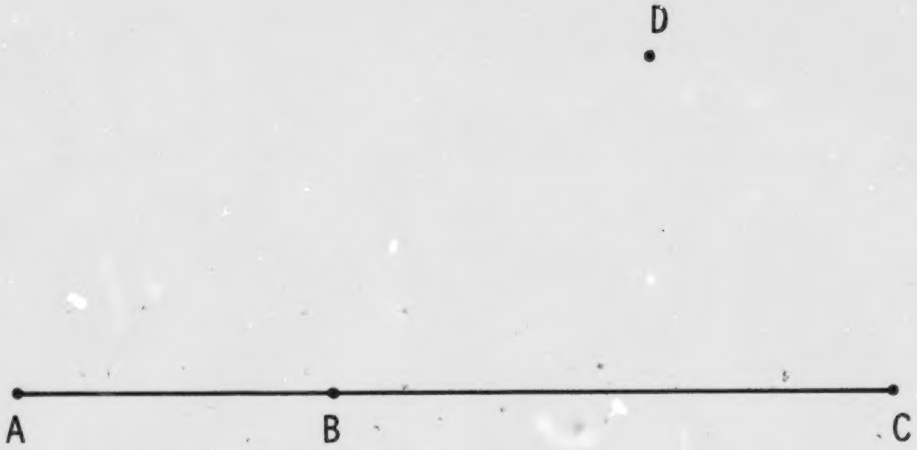
Name the vertices. ________ ________ ________

Name the sides. ________ ________ ________

Name the triangle. ________________

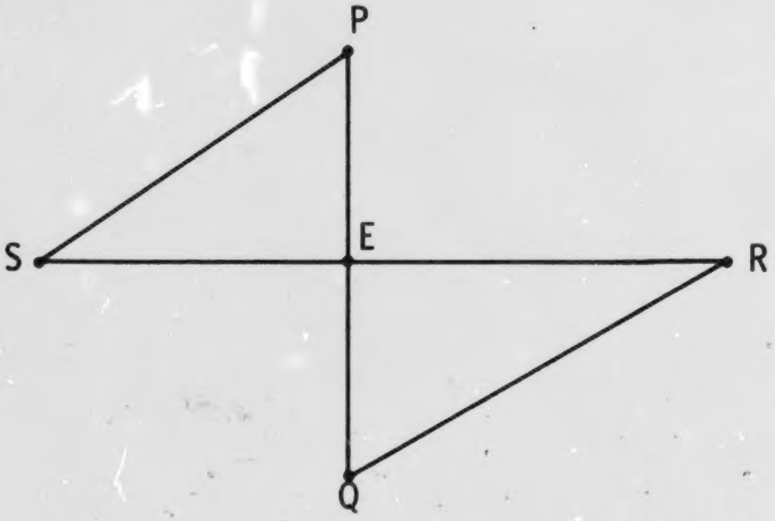
3. The points A, B, and C lie on a line.

Draw $\overline{DA}$, $\overline{DB}$, and $\overline{DC}$.



Name all the triangles drawn. ________ ________ ________

4. $\overline{PQ}$ and $\overline{RS}$ are line segments meeting at the point E.

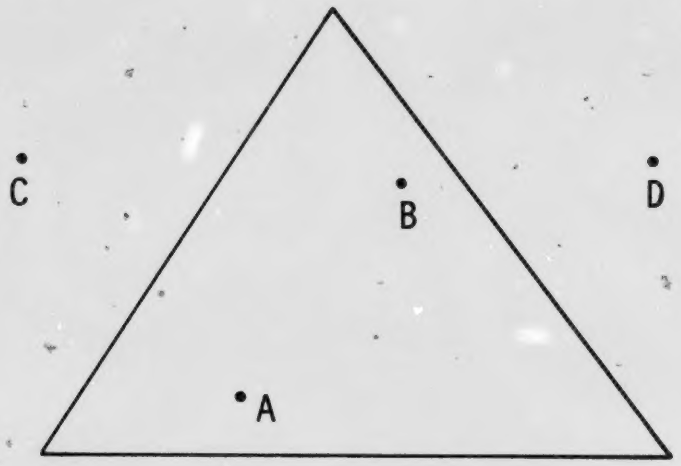


Name the triangles drawn. __________ __________

Draw the line segment $\overline{PR}$.

Name the new triangles drawn. ________ ________ ________

5. Draw a curve from A to B that does not cross the triangle.
   Draw a curve from C to D that does not cross the triangle.

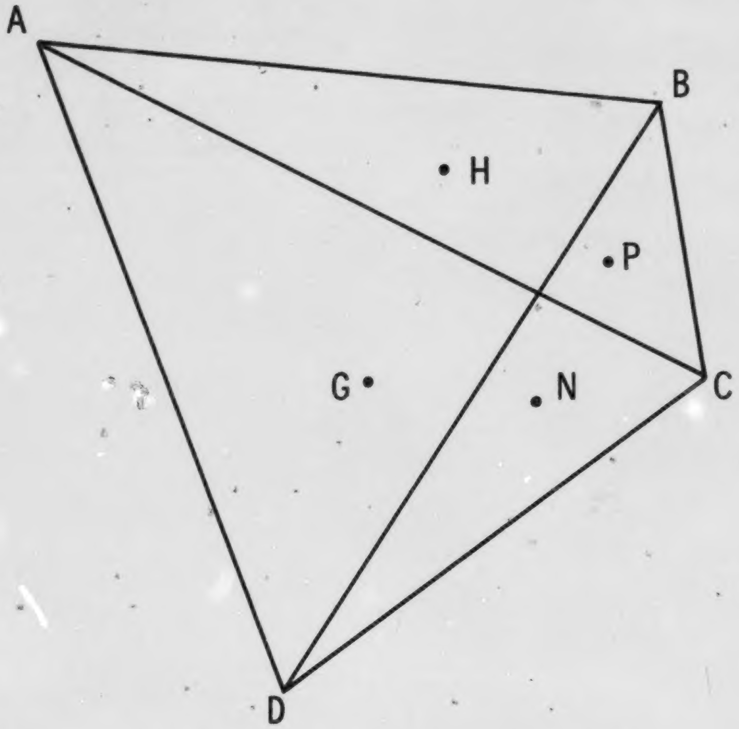


Points A and B are inside / outside the triangle.

Points C and D are inside / outside the triangle.

Can you draw a curve from A to C that does not cross the triangle? Yes No

6.



Name the marked point inside △ABC and inside △DBC. ________

Name the marked point outside △ABC and outside △DBC. ________

Name the marked point inside △ABC but outside △DBC. ________

Name the marked point outside △ABC but inside △DBC. ________

Other Names for Numbers
Fill the blanks.

32 __3__ tens and __2__ ones __30__ + __2__

14 _____ tens and _____ ones _____ + _____

27 _____ tens and _____ ones _____ + _____

43 _____ tens and _____ ones _____ + _____

55 _____ tens and _____ ones _____ + _____

47 _____ tens and _____ ones _____ + _____

24 _____ tens and _____ ones _____ + _____

38 _____ tens and _____ ones _____ + _____

90 _____ tens and _____ ones _____ + _____

56 _____ tens and _____ ones _____ + _____

72 _____ tens and _____ ones _____ + _____

Other Names for Numbers

Fill the blanks.

46 = 40 + 6

52 = 50 + 2

27 = _____ + _____

89 = _____ + _____

73 = _____ + _____

61 = _____ + _____

30 = _____ + _____

95 = _____ + _____

14 = _____ + _____

28 = _____ + _____

20 + 3 = 23

90 + 6 = _____

40 + 5 = _____

70 + 2 = _____

30 + 8 = _____

50 + 7 = _____

10 + 8 = _____

60 + 9 = _____

80 + 4 = _____

70 + 0 = _____

Renaming and Using Basic Facts

Fill the blanks.

35 + 2 = _____ + 5 + 2 35 + 2 = 30 + _____ 35 + 2 = _____	41 + 8 = _____ + 1 + 8 41 + 8 = 40 + _____ 41 + 8 = _____
93 + 6 = _____ + 3 + 6 93 + 6 = 90 + _____ 93 + 6 = _____	85 + 4 = _____ + 5 + 4 85 + 4 = 80 + _____ 85 + 4 = _____
52 + 7 = _____ + 2 + 7 52 + 7 = 50 + _____ 52 + 7 = _____	26 + 2 = _____ + 6 + 2 26 + 2 = 20 + _____ 26 + 2 = _____
16 + 3 = _____ + 6 + 3 16 + 3 = 10 + _____ 16 + 3 = _____	77 + 2 = _____ + 7 + 2 77 + 2 = 70 + _____ 77 + 2 = _____
32 + 4 = _____ + 2 + 4 32 + 4 = 30 + _____ 32 + 4 = _____	53 + 5 = _____ + 3 + 5 53 + 5 = 50 + _____ 53 + 5 = _____

Addition

32 + 7 = _____

Rename 32: 30 + 2

Add 7: 7

30 + 9 Write 39 to complete the equation.

Fill the blanks.

25 + 4 = 29 20 + 5 4 20+9	76 + 3 = _____ 70 + 6 3	81 + 6 = _____ 80 + 1 6
55 + 2 = _____ 50 + 5 2	13 + 5 = _____ 10 + 3 5	98 + 1 = _____ 90 + 8 1
62 + 4 = _____ 60 + 2 4	74 + 3 = _____ 70 + 4 3	23 + 2 = _____ 20 + 3 2

Addition

Rename, add, and fill the blank.

45 + 1 = _____ 40 + 5 _____1	14 + 2 = _____	91 + 3 = _____
52 + 5 = _____	31 + 8 = _____	87 + 2 = _____
21 + 5 = _____	73 + 4 = _____	54 + 5 = _____
42 + 6 = _____	84 + 4 = _____	32 + 3 = _____

Subtraction

19 - 4 = 15 10 + 9 - 4 10+5	82 - 2 = _____ 80 + 2 - 2	36 - 3 = _____ 30 + 6 - 3
44 - 1 = _____ 40 + 4 - 1	68 - 5 = _____ 60 + 8 - 5	97 - 6 = _____ 90 + 7 - 6
23 - 2 = _____ 20 + 3 - 2	79 - 3 = _____ 70 + 9 - 3	38 - 6 = _____ 30 + 8 - 6
75 - 3 = _____ 70 + 5 - 3	65 - 4 = _____ 60 + 5 - 4	43 - 3 = _____ 40 + 3 - 3

Subtraction

Rename, subtract, and fill the blank.

57 - 5 = _____ 50 + 7 - 5 ______	98 - 3 = _____	89 - 7 = _____
24 - 4 = _____	18 - 2 = _____	79 - 5 = _____
56 - 2 = _____	84 - 3 = _____	75 - 2 = _____
46 - 6 = _____	37 - 4 = _____	38 - 5 = _____

Adding Tens

Fill the blanks.

4 tens and 5 tens are __________ tens.

40 + 50 = __________

3 tens and 2 tens are __________ tens.

30 + 20 = __________

7 tens and 1 ten are __________ tens.

70 + 10 = __________

6 tens and 3 tens are __________ tens.

60 + 30 = __________

2 tens and 5 tens are __________ tens.

20 + 50 = __________

5 tens and 3 tens are __________ tens.

50 + 30 = __________

1 ten and 6 tens are __________ tens.

10 + 60 = __________

20 + 20 = _____

60 + 10 = _____

50 + 40 = _____

40 + 30 = _____

70 + 20 = _____

30 + 60 = _____

20 + 40 = _____

50 + 10 = _____

40 + 40 = _____

20 + 70 = _____

10 + 50 = _____

60 + 20 = _____

40 + 50 = _____

20 + 60 = _____

Removing and Subtracting Tens

Fill the blanks.

Start with 9 tens. Remove 4 tens. There are _____ tens in the set remaining.

90 - 40 = ____

Start with 7 tens. Remove 2 tens. There are _____ tens in the set remaining.

70 - 20 = ____

Start with 8 tens. Remove 6 tens. There are _____ tens in the set remaining.

80 - 60 = ____

60 - 30 = _____

80 - 20 = _____

90 - 50 = _____

60 - 50 = _____

90 - 70 = _____

80 - 40 = _____

60 - 10 = _____

60 - 40 = _____

90 - 30 = _____

80 - 10 = _____

70 - 40 = _____

90 - 20 = _____

80 - 30 = _____

50 - 20 = _____

20 - 10 = _____

70 - 60 = _____

40 - 20 = _____

50 - 40 = _____

Sums of Numbers

63 + 20 = ----- 60 + 3 20 ------	45 + 30 = ----- 40 + 5 30 ------	70 + 18 = ----- 70 10 + 8 ------
39 + 60 = -----	14 + 40 = -----	56 + 30 = -----
82 + 10 = -----	60 + 15 = -----	50 + 48 = -----
10 + 56 = -----	40 + 53 = -----	64 + 30 = -----

Subtraction

76 - 50 = 26 70 + 6 -50 20 + 6	43 - 10 = _____ 40 + 3 - 10	59 - 40 = _____ 50 + 9 - 40
31 - 30 = _____	98 - 60 = _____	24 - 10 = _____
65 - 50 = _____	58 - 30 = _____	64 - 40 = _____
16 - 10 = _____	87 - 50 = _____	97 - 70 = _____

Practice in Addition

74 + 15 = 89 70 + 4 10 + 5 80+9	12 + 45 = ----- 10 + 2 40 + 5
36 + 61 = -----	63 + 24 = -----
57 + 12 = -----	81 + 16 = -----
58 + 30 = -----	75 + 22 = -----

Subtraction

68 - 56 = 12

$$\begin{array}{r} 60 + 8 \\ -(\underline{50 + 6}) \\ 10 + 2 \end{array}$$

45 - 24 = _____

$$\begin{array}{r} 40 + 5 \\ (\underline{20 + 4}) \end{array}$$

83 - 51 = _____

$$\begin{array}{r} 80 + 3 \\ -(\underline{50 + 1}) \end{array}$$

31 - 21 = _____

$$\begin{array}{r} 30 + 1 \\ -(\underline{20 + 1}) \end{array}$$

59 - 54 = _____

76 - 42 = _____

27 - 15 = _____

12 - 12 = _____

Subtraction

99 - 53 = _____

90 + 9
-(50 + 3)
______

44 - 13 = _____

40 + 4
-(10 + 3)
______

86 - 43 = _____

57 - 34 = _____

78 - 27 = _____

65 - 42 = _____

75 - 22 = _____

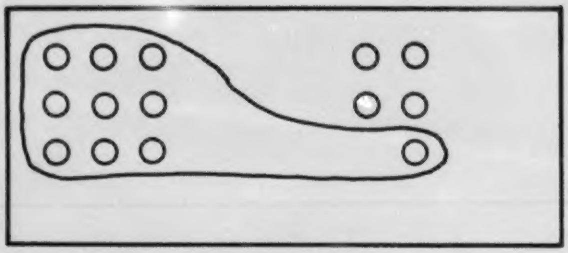
87 - 17 = _____

Practice with Addition and Subtraction

32 + 51 = _____	83 + 13 = _____
45 - 24 = _____	89 - 72 = _____
57 - 25 = _____	66 + 32 = _____
46 - 16 = _____	93 - 71 = _____

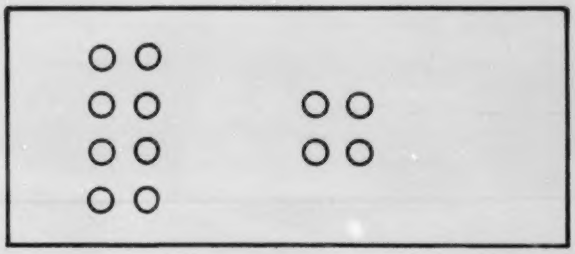
Using Ten in Addition

Ring ten. Fill the blanks.



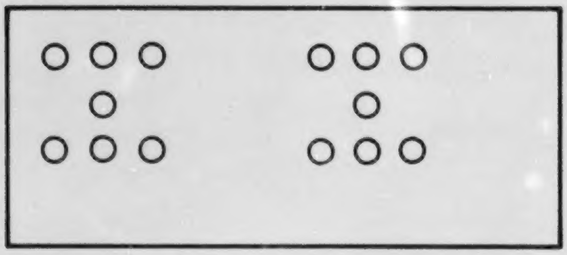
9 + 5 = 10 + ____

9 + 5 = ____



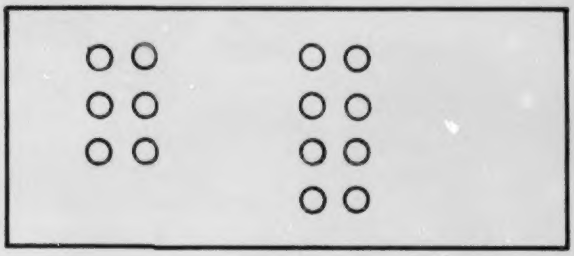
8 + 4 = 10 + ____

8 + 4 = ____



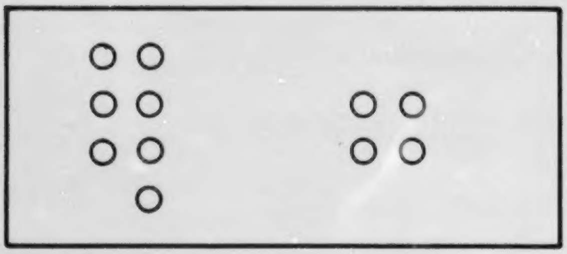
7 + 7 = 10 + ____

7 + 7 = ____



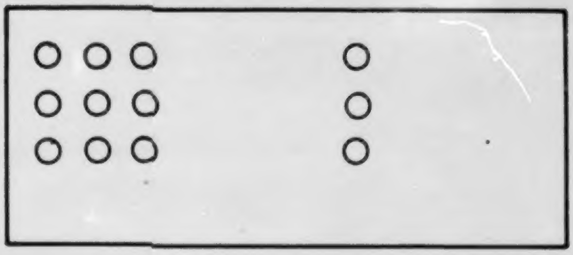
6 + 8 = 10 + ____

6 + 8 = ____



7 + 4 = 10 + ____

7 + 4 = ____

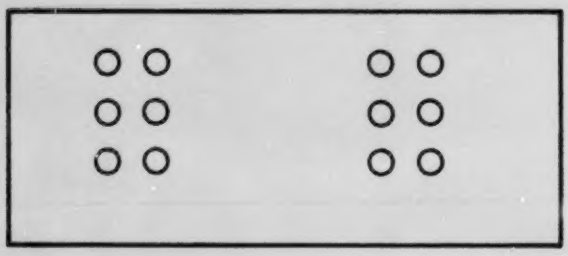


9 + 3 = 10 + ____

9 + 3 = ____

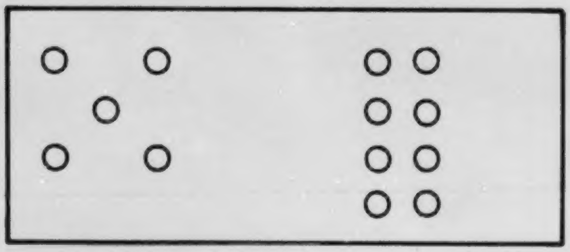
Using Ten in Addition

Ring ten. Fill the blanks.



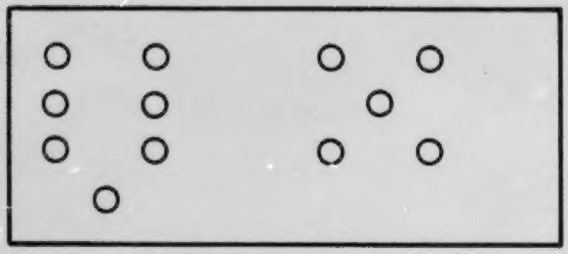
6 + 6 = 10 + ____

6 + 6 = ____



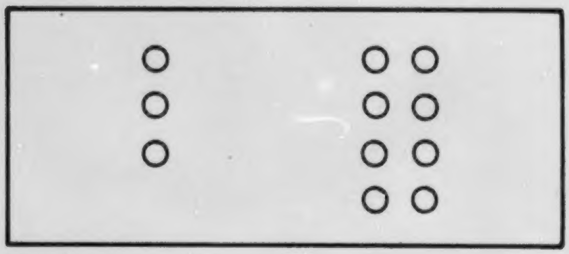
5 + 8 = 10 + ____

5 + 8 = ____



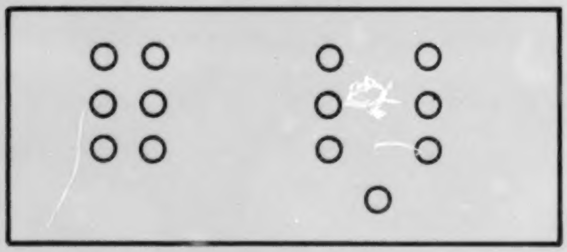
7 + 5 = 10 + ____

7 + 5 = ____



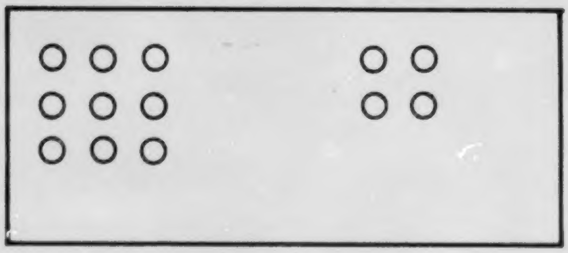
3 + 8 = 10 + ____

3 + 8 = ____



6 + 7 = 10 + ____

6 + 7 = ____



9 + 4 = 10 + ____

9 + 4 = ____

Partitions of Ten

Fill the blanks.

10 is the sum of
2 and _____
6 and _____
4 and _____
8 and _____
1 and _____
5 and _____
3 and _____
9 and _____
7 and _____

8 + _____ = 10

5 + _____ = 10

4 + _____ = 10

2 + _____ = 10

10 = _____ + 8

10 = _____ + 5

10 = _____ + 7

10 = _____ + 4

1 + _____ = 10

7 + _____ = 10

6 + _____ = 10

9 + _____ = 10

10 = _____ + 3

10 = _____ + 9

10 = _____ + 6

10 = _____ + 1

Adding to Ten

10 + 4 = _____

10 + 3 = _____

10 + 1 = _____

10 + 6 = _____

10 + 9 = _____

10 + 7 = _____

10 + 8 = _____

10 + 5 = _____

10 + 2 = _____

Using 10 in Addition

Fill the blanks.

9 + 4 = 10 + _____
9 + 4 = _____

7 + 5 = 10 + _____
7 + 5 = _____

5 + 6 = 10 + _____
5 + 6 = _____

7 + 4 = 10 + _____
7 + 4 = _____

6 + 8 = 10 + _____
6 + 8 = _____

7 + 6 = 10 + _____
7 + 6 = _____

8 + 4 = 10 + _____
8 + 4 = _____

3 + 8 = 10 + _____
3 + 8 = _____

4 + 9 = 10 + _____
4 + 9 = _____

5 + 8 = 10 + _____
5 + 8 = _____

6 + 7 = 10 + _____
6 + 7 = _____

5 + 9 = 10 + _____
5 + 9 = _____

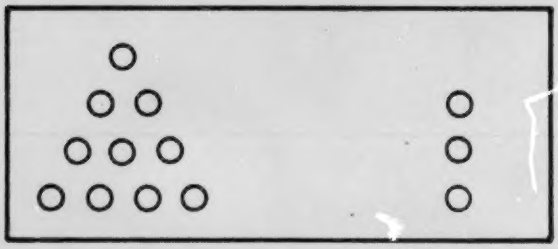
4 + 7 = 10 + _____
4 + 7 = _____

3 + 9 = 10 + _____
3 + 9 = _____

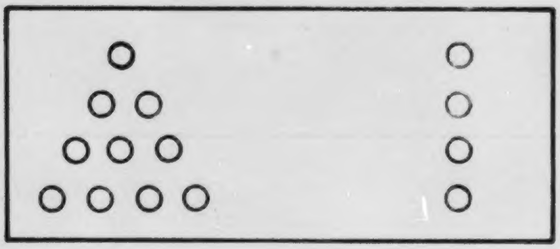
Using 10 in Subtraction

Ring the set you think of removing.

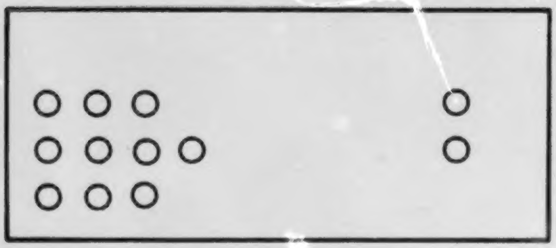
Fill the blanks.



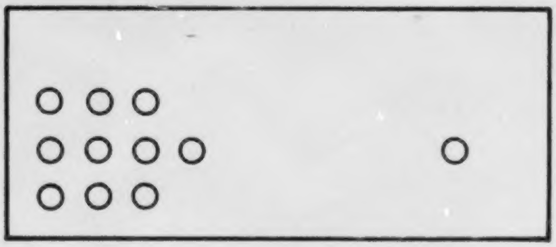
13 - 8 = ____



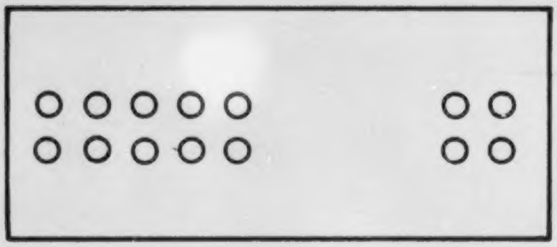
14 - 6 = ____



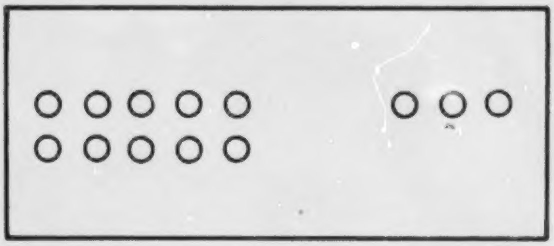
12 - 4 = ____



11 - 2 = ____



14 - 9 = ____

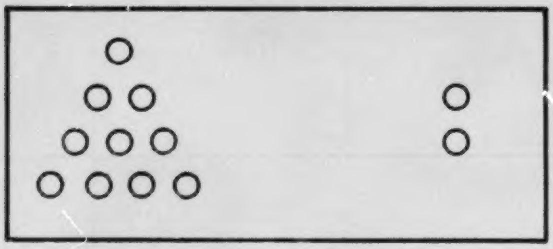


13 - 6 = ____

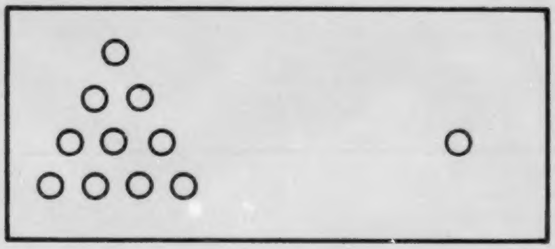
Using 10 in Subtraction

Ring the set you think of removing.

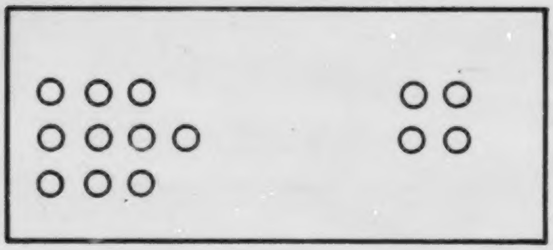
Fill the blanks.



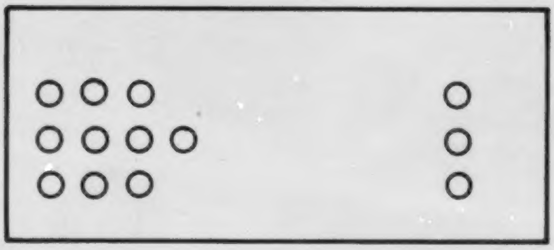
12 - 9 = ____



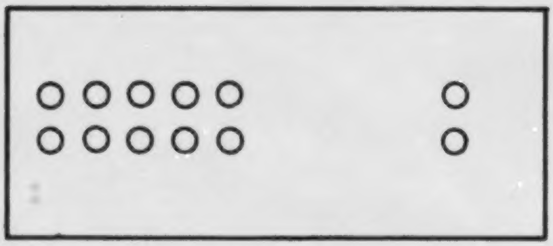
11 - 6 = ____



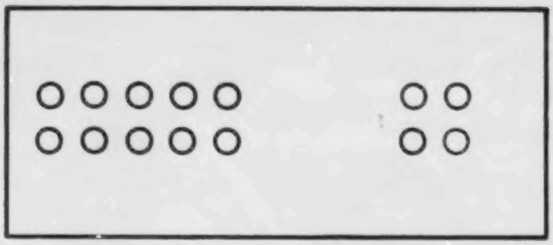
14 - 7 = ____



13 - 5 = ____



12 - 7 = ____



14 - 8 = ____

11
is the sum of

3 and ____

7 and ____

5 and ____

2 and ____

8 and ____

4 and ____

6 and ____

9 and ____

5 + 5 = _____

5 + 6 = _____

5 + 7 = _____

6 + 6 = _____

6 + 5 = _____

10 - 5 = _____

11 - 5 = _____

10 - 6 = _____

11 - 6 = _____

12
is the sum of

8 and ____

5 and ____

9 and ____

4 and ____

7 and ____

3 and ____

6 and ____

10 - 8 = ____

12 - 8 = ____

10 - 4 = ____

12 - 4 = ____

10 - 9 = ____

12 - 9 = ____

10 - 3 = ____

11 - 3 = ____

10 - 7 = ____

12 - 7 = ____

10 - 5 = ____

12 - 3 = ____

12 - 6 = ____

11 - 7 = ____

12 - 5 = ____

4 + ____ = 12

7 + ____ = 11

3 + ____ = 11

Practice with Basic Facts

Fill the boxes.

+	3	2
5		
7		
9		

+	4	3
8		
6		
4		

+	5	4
7		
5		
6		

4 + _____ = 10

3 + _____ = 11

_____ + 4 = 12

2 + _____ = 12

6 + _____ = 11

_____ + 5 = 12

9 + _____ = 11

7 + _____ = 12

_____ + 8 = 12

Find the sums:

2	4	5	3	4	6
3	4	2	3	2	1
7	4	5	5	6	5

7	9	4	3	2	3
2	1	0	4	4	5
3	2	8	5	5	3

Practice with Basic Facts

13
is the sum of

5 and ____

9 and ____

4 and ____

8 and ____

6 and ____

7 and ____

7 + 3 = _____

7 + 6 = _____

8 + 5 = _____

6 + 7 = _____

5 + 8 = _____

9 + 4 = _____

4 + 9 = _____

6 + 6 = _____

12 = 6 + _____

13 = 8 + _____

11 = 3 + _____

12 = 8 + _____

11 = 6 + _____

13 = 5 + _____

12 = 7 + _____

13 = 4 + _____

13 - 4 = _____

12 - 8 = _____

13 - 6 = _____

11 - 6 = _____

12 - 3 = _____

13 - 7 = _____

12 - 5 = _____

11 - 4 = _____

13 - 8 = _____

12 - 9 = _____

12 - 4 = _____

13 - 9 = _____

Write the sums:

5	6	2	2	2	4	2
5	3	4	8	3	5	5
3	4	7	1	8	4	4

Practice with Basic Facts

14
is the sum of

7 and _____

8 and _____

5 and _____

9 and _____

6 and _____

5 + 5 = _____

6 + 6 = _____

7 + 7 = _____

4 + 9 = _____

6 + 7 = _____

8 + 6 = _____

10 - 5 = _____

12 - 6 = _____

14 - 7 = _____

12 - 8 = _____

13 - 9 = _____

14 - 5 = _____

5 + 7 = _____

9 + 5 = _____

6 + 8 = _____

6 + _____ = 14

8 + _____ = 11

5 + _____ = 12

9 + _____ = 14

8 + 4 = _____

9 + 3 = _____

7 + 6 = _____

8 + _____ = 14

4 + _____ = 12

9 + _____ = 12

8 + _____ = 13

13 - 5 = _____

13 - 7 = _____

11 - 3 = _____

_____ - 3 = 9

_____ - 8 = 5

_____ - 7 = 6

_____ - 9 = 2

Fill the blanks.

9 + 8 = _____

6 + 9 = _____

7 + 8 = _____

9 + 7 = _____

8 + 6 = _____

9 + 9 = _____

9 + 6 = _____

8 + 8 = _____

9 + 5 = _____

8 + 7 = _____

7 + 9 = _____

8 + 9 = _____

17 - 8 = _____

16 - 9 = _____

18 - 9 = _____

15 - 8 = _____

17 - 9 = _____

16 - 8 = _____

Put in < (is less than), > (is greater than), or =.

5 + 9   8 + 7

9 + 7   8 + 9

7 + 6   5 + 8

6 + 8   7 + 9

18 - 9   15 - 7

14 - 7   16 - 8

17 - 9   15 - 6

15 - 8   14 - 6

14 - 5   17 - 8

16 - 9   14 - 5

9 + 6   8 + 8

8 + 5   7 + 7

An Addition Table

+	0	1	2	3	4	5	6	7	8	9
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										

Show the following on the table:

9 + 6   9 + 7   9 + 8   6 + 9   7 + 7

8 + 7   7 + 9   8 + 9   9 + 5   6 + 8

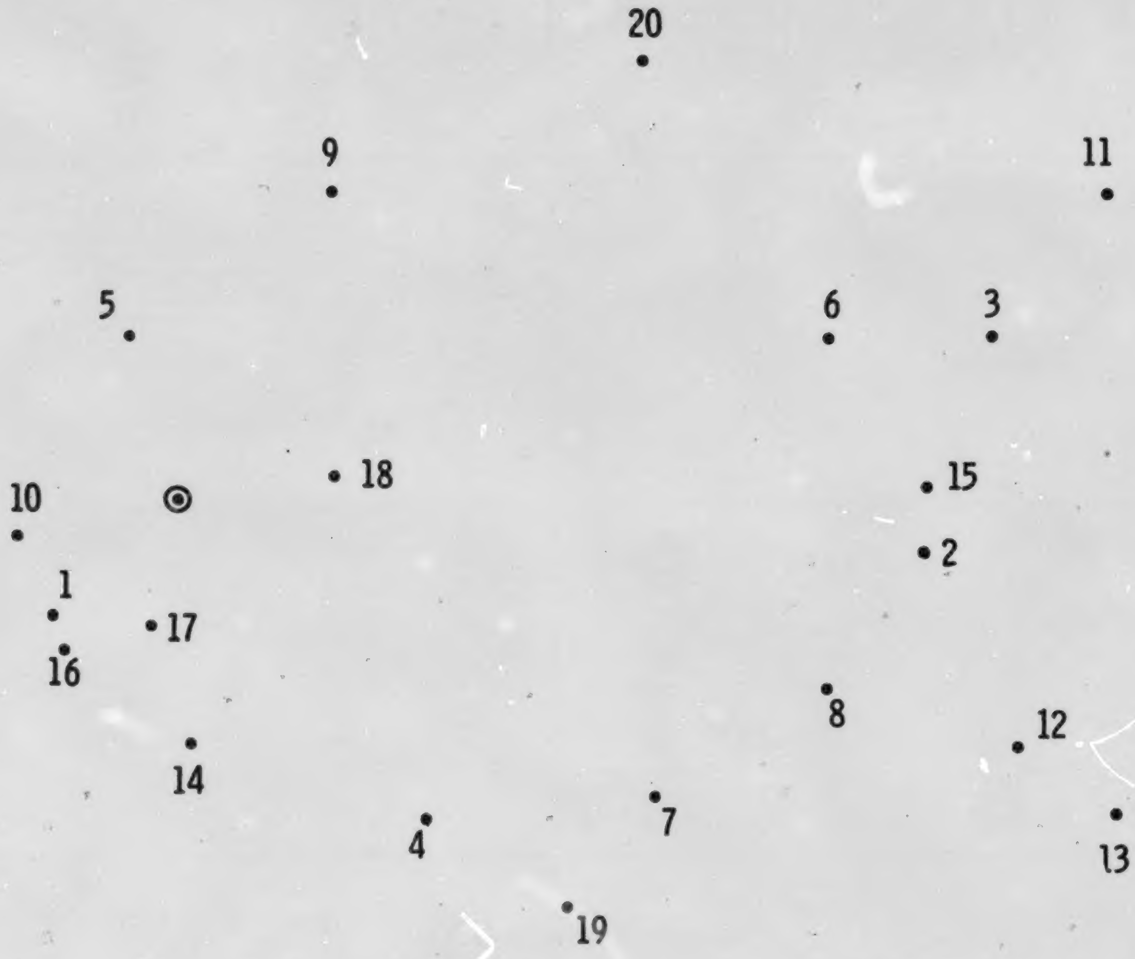
7 + 8   8 + 8   9 + 9   8 + 6   5 + 9

For Fun!

Fill the blanks.

When you have the first blank filled, find the dot that shows your answer. Start there. Draw a path from that dot to the dot that shows your second answer, and so on.

1. 16 - 7 = ____
2. 9 + 9 = ____
3. 8 + 6 = ____
4. 13 - 9 = ____
5. 12 + 7 = ____
6. 14 - 7 = ____
7. 17 - 9 = ____
8. 10 - 8 = ____
9. 9 + 3 = ____
10. 8 + 5 = ____
11. 7 + 4 = ____
12. 11 - 8 = ____
13. 8 + 7 = ____
14. 15 - 9 = ____
15. 17 + 3 = ____
16. 14 - 5 = ____
17. 11 - 6 = ____
18. 6 + 4 = ____
19. 10 - 9 = ____
20. 9 + 8 = ____
21. 8 + 8 = ____
22. 9 + 5 = ____


20
9
11
5
6
3
18
15
10
2
1
17
16
8
12
14
7
13
4
19

What picture did you find?

★ Doing and Undoing

Fill the blanks.

36 + _____ = 78 78 - _ = _____	_____ + 41 = 64
_____ - 44 = 23	26 + _____ = 68
_____ + 12 = 59	_____ - 54 = 41
78 - _____ = 65	_____ - 40 = 34

Problem Solving

Write the equations.

1. Jim had 40 marbles.
He gave 10 marbles to Bill
and 20 marbles to Jack.
How many marbles did Jim have then?
Jim had ______ marbles then.

____

____

2. Bob has 15 marbles.
Three marbles are red
and 7 marbles are blue.
How many marbles are not red or blue?

______ marbles are not red or blue.

____

____

3. Tom had 10 marbles.
Jerry gave 15 marbles to Tom.
Tom gave 5 marbles to Mike.
How many marbles did Tom have then?

Tom had ______ marbles then.

____

____

4. Jimmy had 20 marbles.
He gave 5 marbles to John.
Mother gave some marbles to Jimmy
and then he had 25 marbles.

How many marbles did Mother give to Jimmy?

Mother gave ______ marbles to Jimmy.

____

____

Problem Solving

Write the equations.

5. Father had 3 red books
and 4 brown ones.
He gave 2 of his brown books
to Grandfather.

______

______

How many red books and brown books
did Father have then?

Father had ______ red books and brown books.

6. Mother baked 20 chocolate cookies
and 30 white cookies.
The children ate 10 white cookies
and no chocolate cookies.
How many cookies did Mother have
then?

______

______

Mother had ______ cookies then.

7. Ten horses were in a field.
The farmer took 2 horses.

Eight cows came.
How many horses and cows are there
now?
There are ______ horses and cows now.

______

______

8. Kim had 2 dimes and
Mother gave him another dime.

He spent 8 cents.
How many cents does Kim have now?

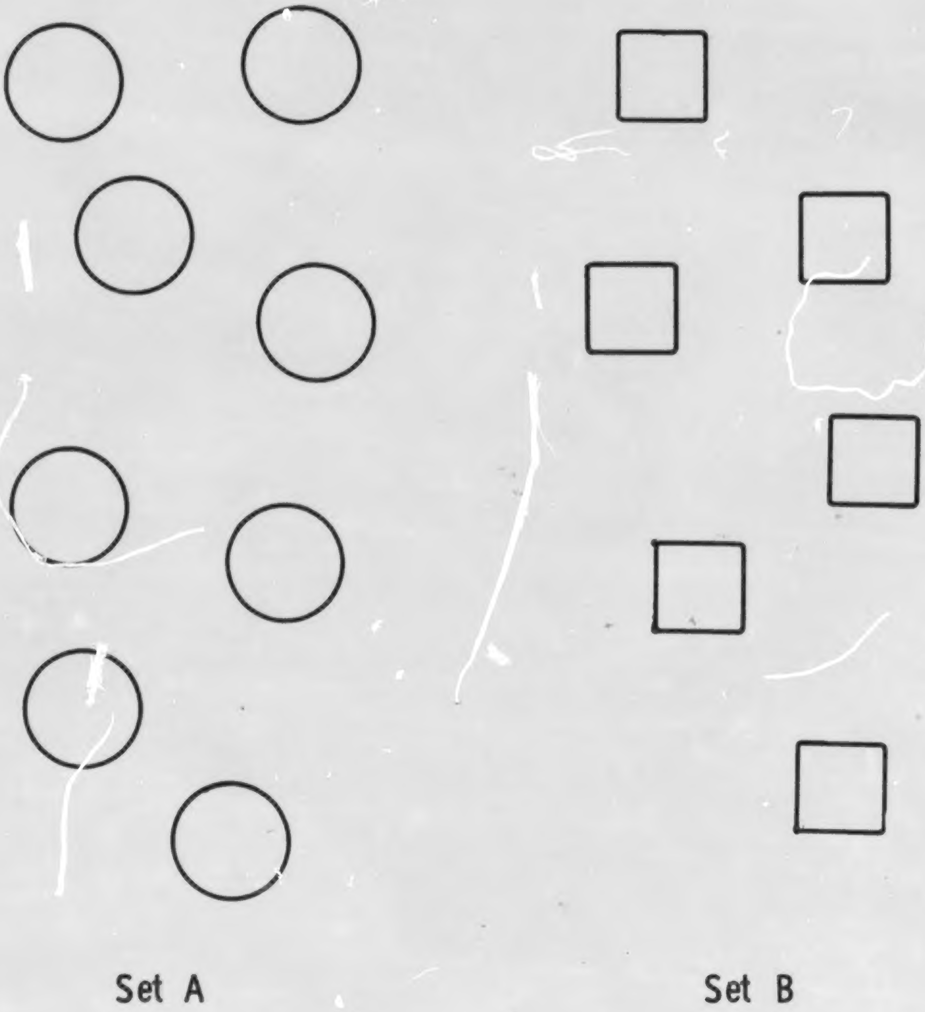
______

______

Kim has ______ cents now.

Comparing Sets of Objects

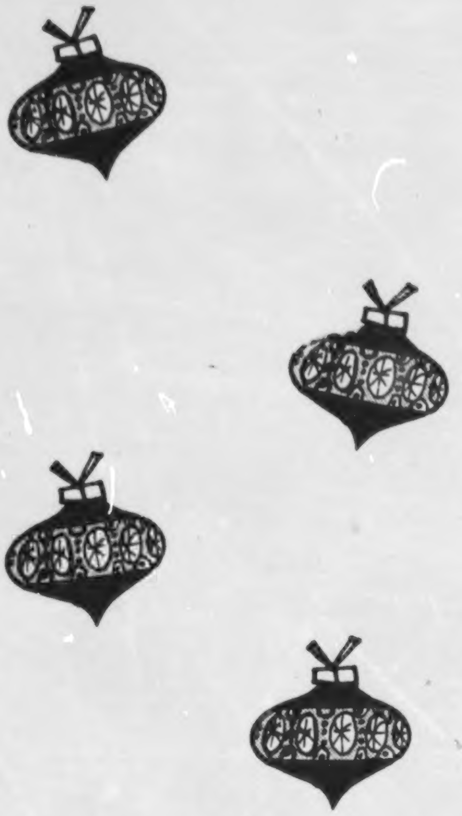
1. Tell without counting which set has more members.



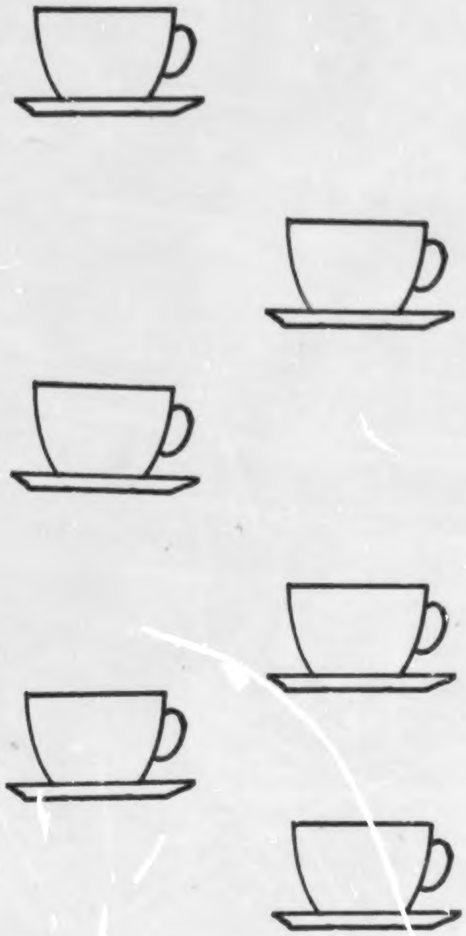
Set ________ has more members.

Comparing Sets of Objects

2. Tell without counting which set has fewer members.



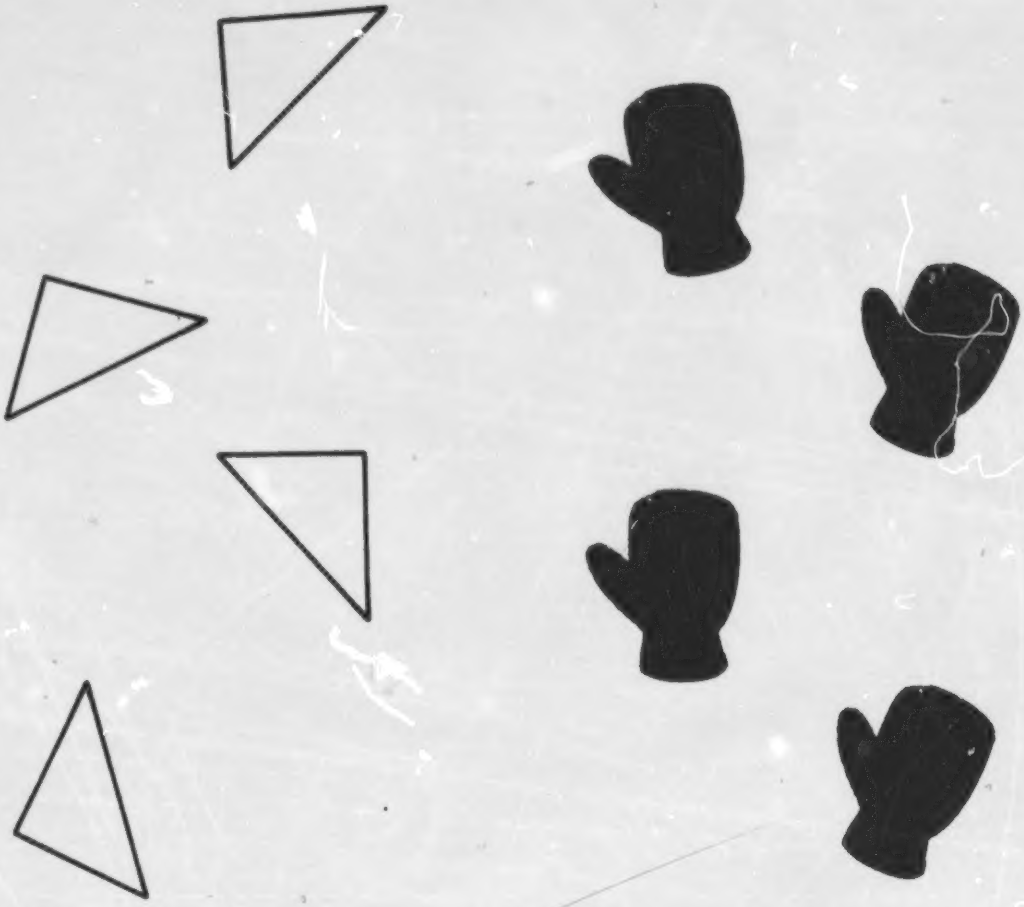
Set C



Set D

Set _________ has fewer members.

3. Without counting, compare these sets.

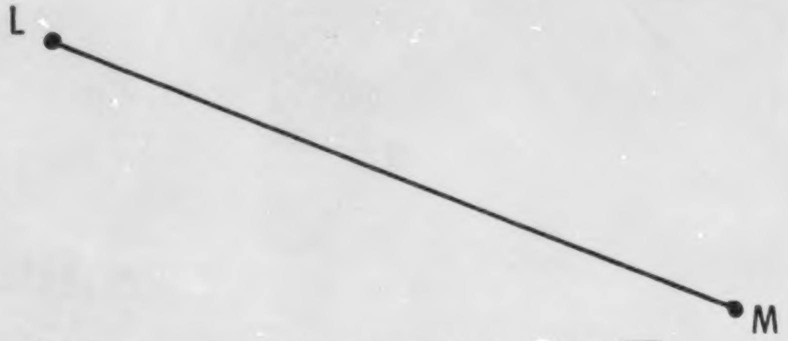


Put a ring around the correct words.

fewer members than
Set E has as many members as Set F.
more members than

Line Segments

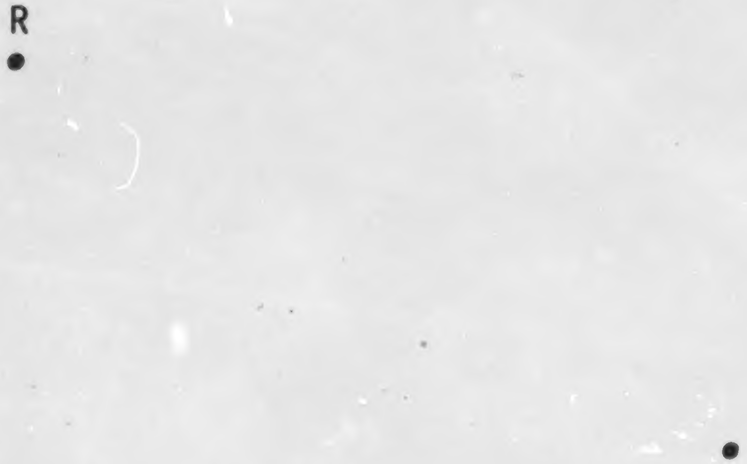
1.



Write names for the two endpoints of $\overline{LM}$. ______ ______

Write another name for $\overline{LM}$. ________.

2.



One point is named R.

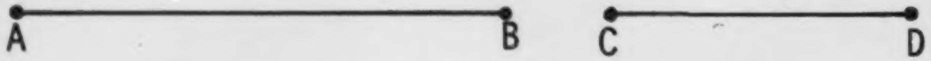
Another point is marked.

Name this point O.

Then draw $\overline{OR}$.

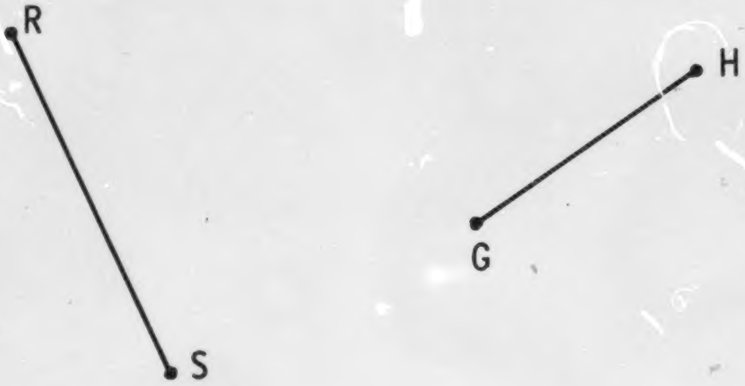
Comparing Line Segments

1.



Which line segment is longer? ____________

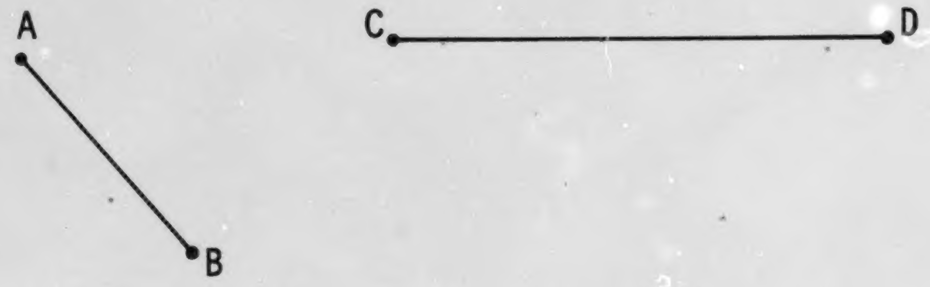
2.



Which line segment is shorter? __________

Comparing Line Segments

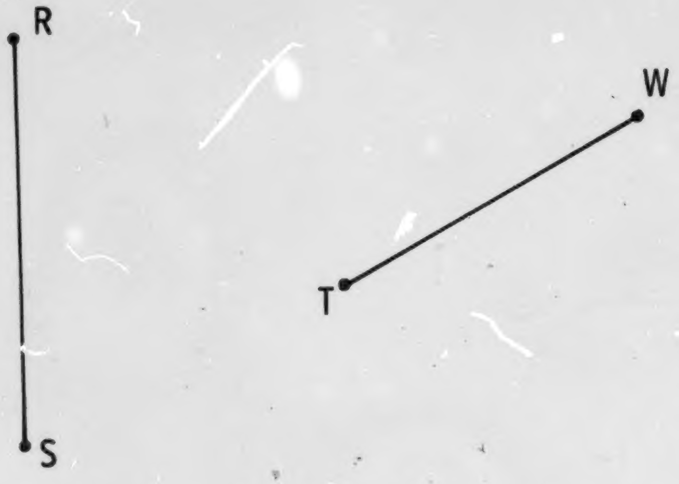
3.



Put a ring around the correct word.

shorter
$\overline{AB}$ is than $\overline{CD}$.
longer

4.

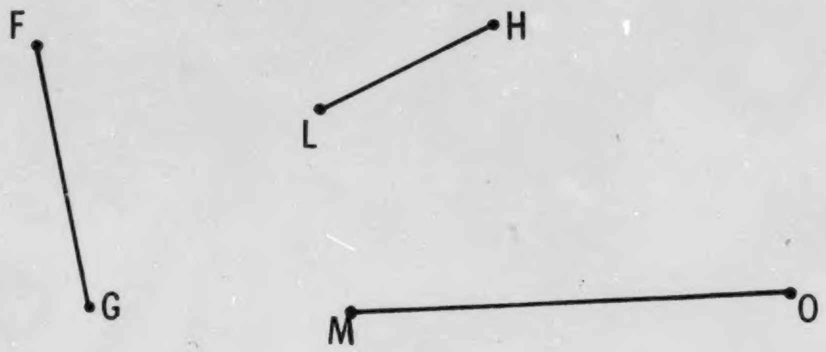


Put a ring around the correct word.

shorter
$\overline{RS}$ is than $\overline{TW}$.
longer

Comparing Line Segments

5.



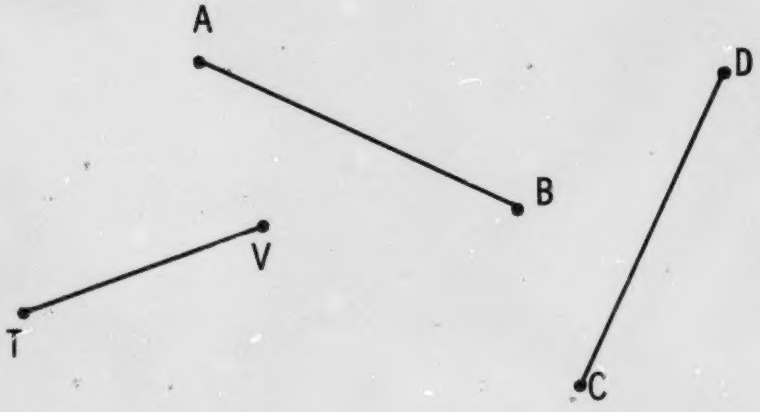
$\overline{FG}$ is shorter than ________.

$\overline{GF}$ is longer than ________.

$\overline{MO}$ is longer than ________ and ________.

$\overline{HL}$ is shorter than ________ and ________.

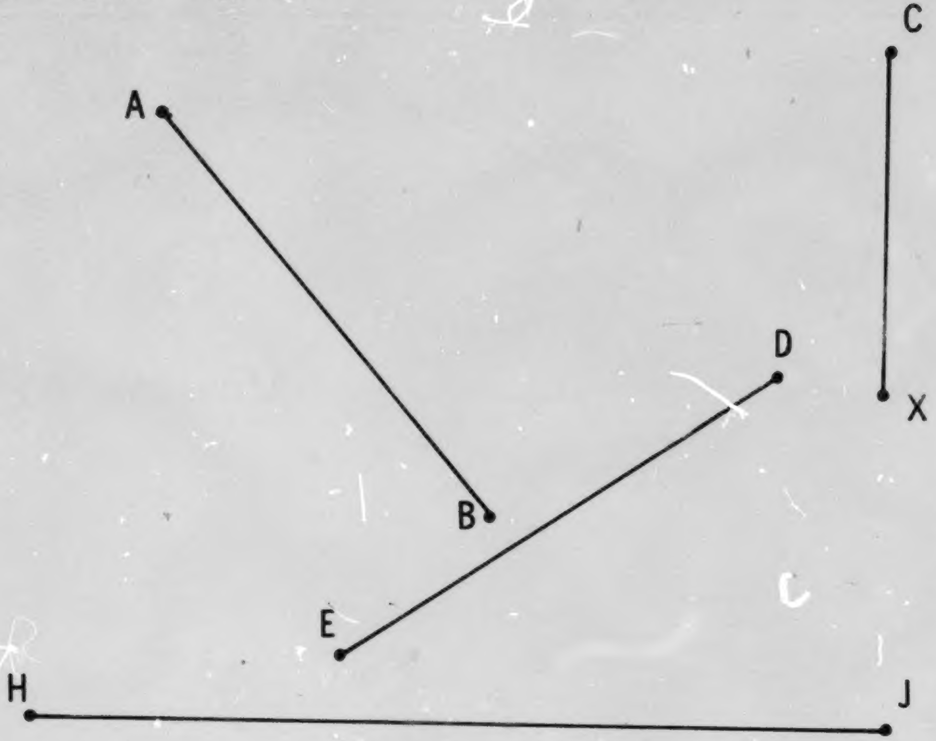
6.



Put a ring around the correct words.

is shorter than
$\overline{AB}$ is the same length as $\overline{CD}$.
is longer than

Comparing Line Segments



7. Write a name of a segment in each blank.

__________ is shorter than $\overline{DE}$.

__________ is longer than $\overline{BA}$.

__________ is the same length as __________.

8. Write the correct word in each row.

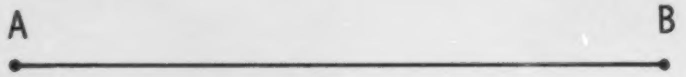
$\overline{CX}$ is ______________________________________ than $\overline{AB}$.

$\overline{AB}$ is ______________________________________ than $\overline{HJ}$.

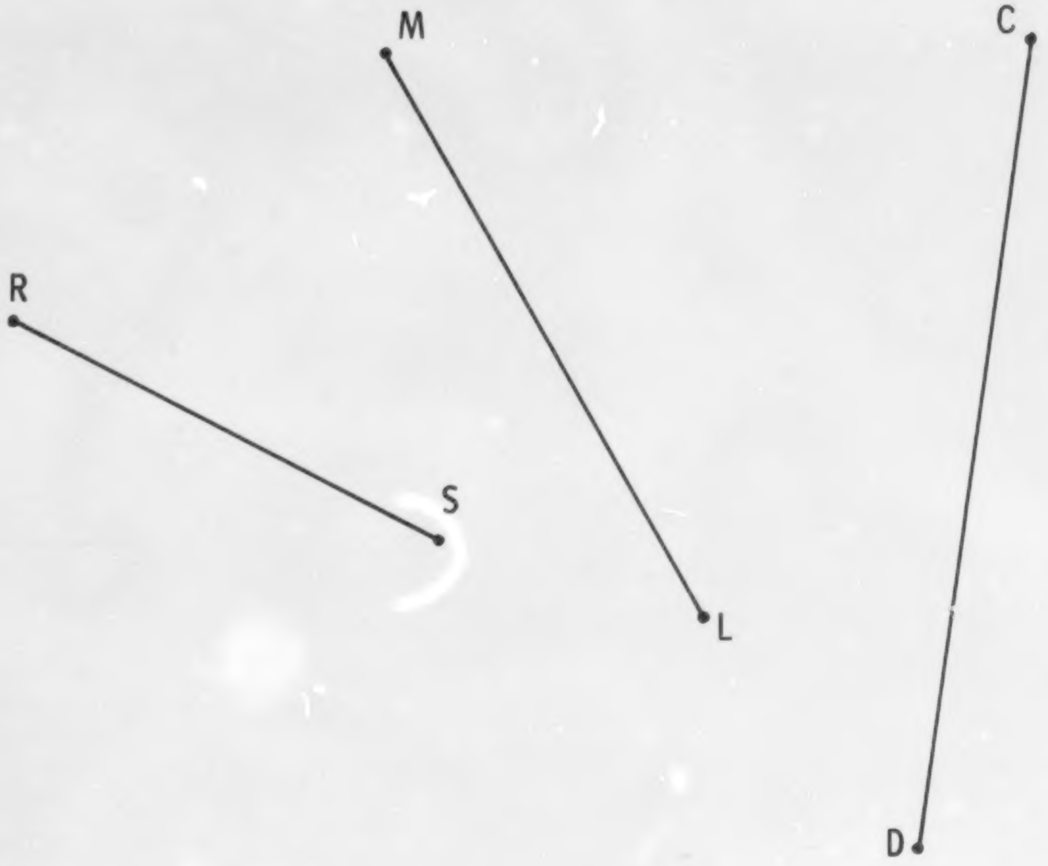
$\overline{ED}$ is ______________________________________ than $\overline{CX}$.

Congruence and Line Segments

1.



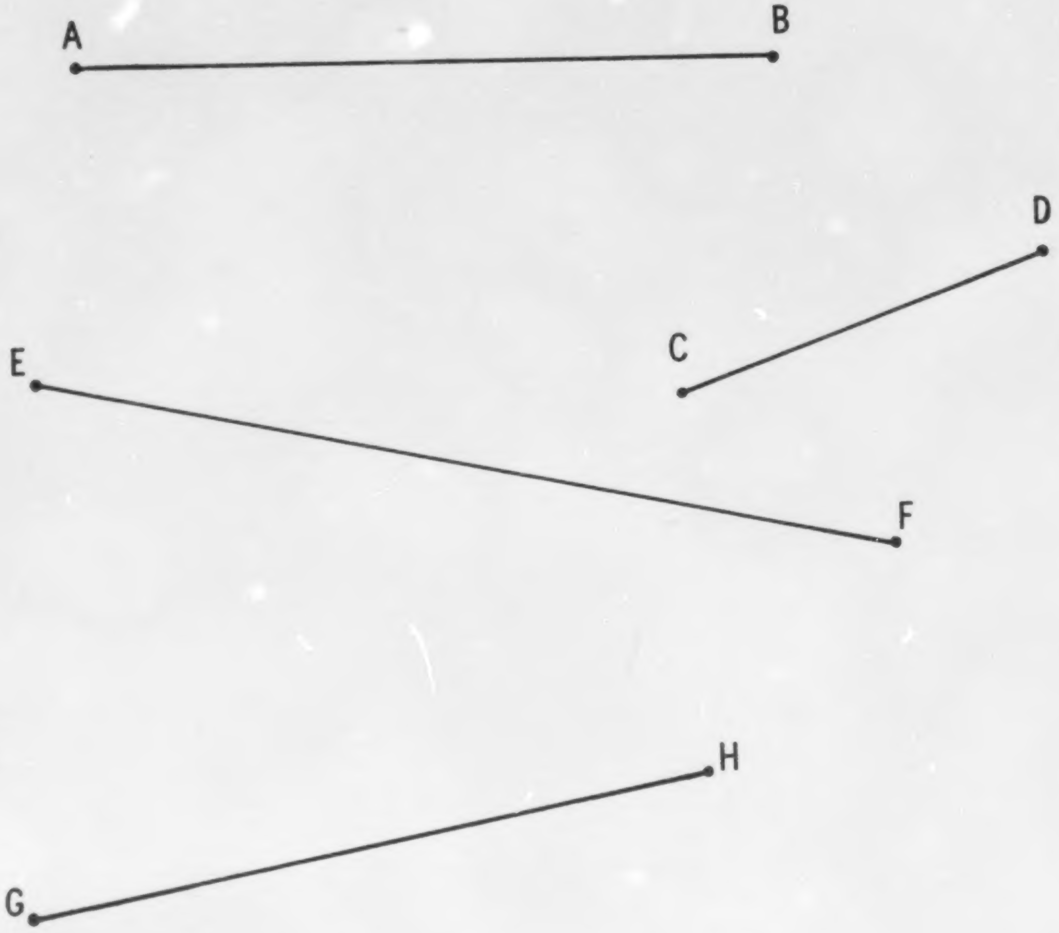
Which line segment is congruent to $\overline{AB}$?



________ is congruent to $\overline{AB}$.

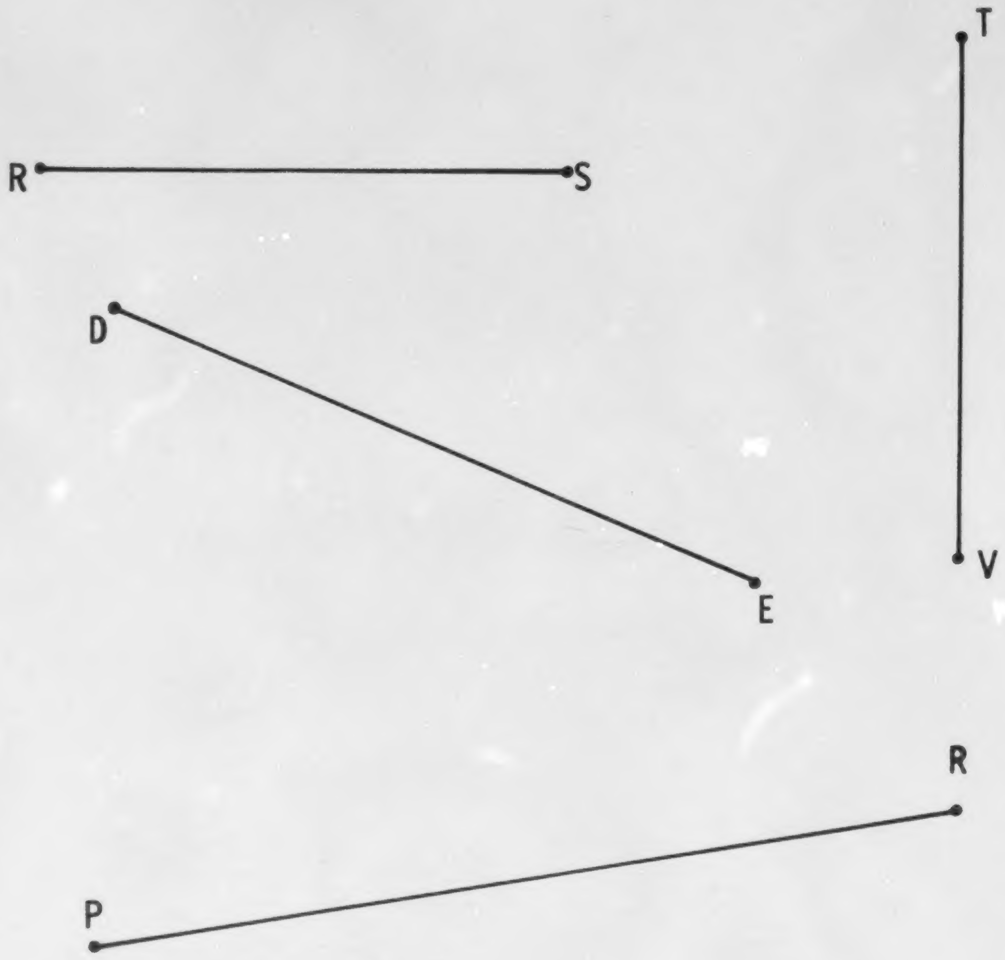
Congruence of Line Segments

2.



$\overline{AB}$ is congruent to ________.

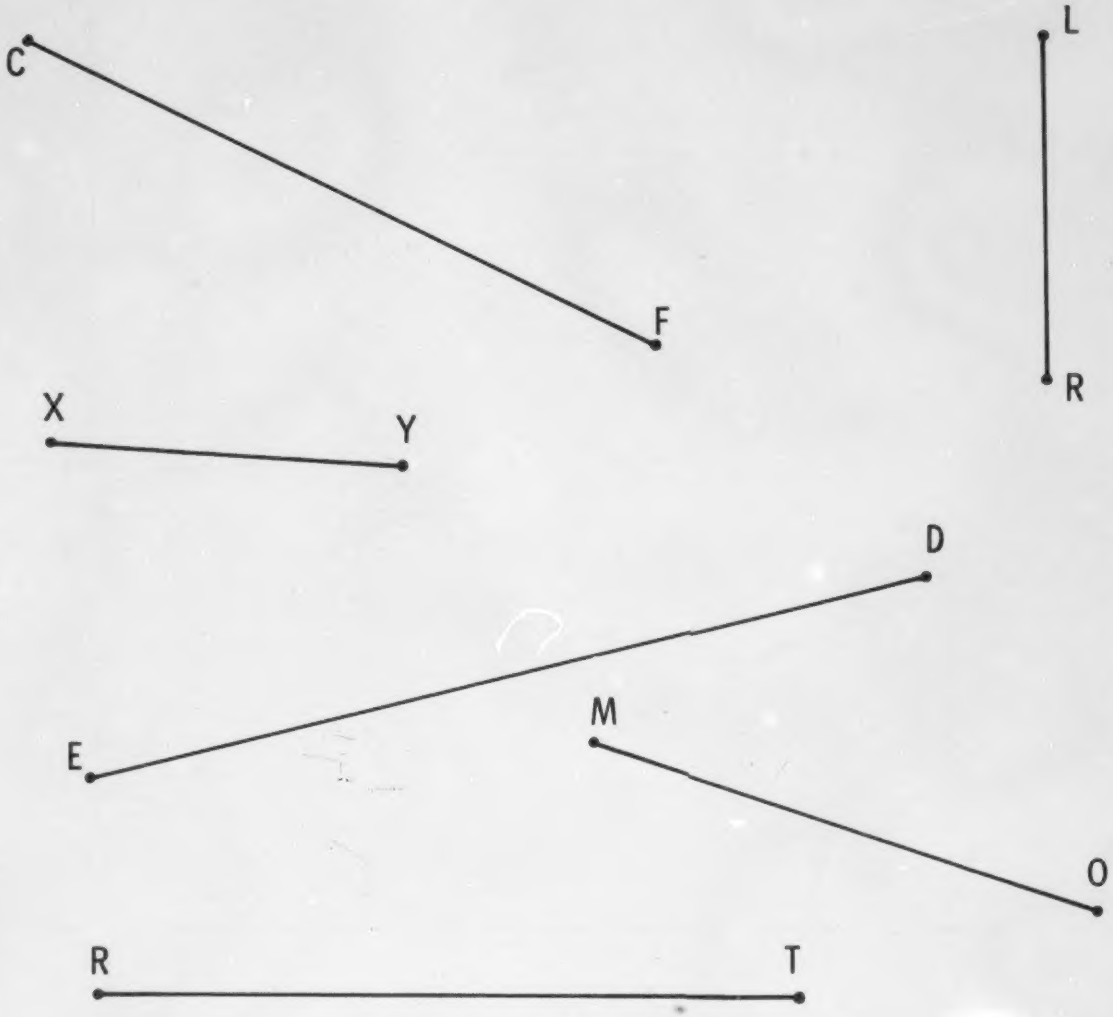
3.



__________ is congruent to __________.

Congruence of Line Segments

4.

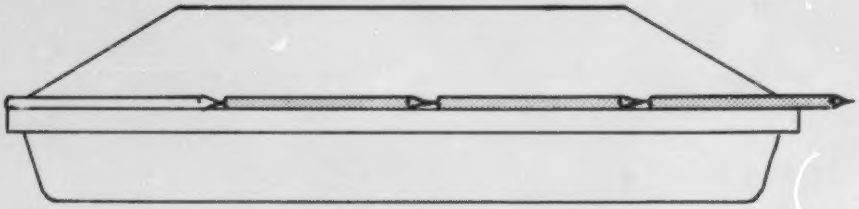

C
F
L
R
X
Y
D
E
M
O
R
T

$\overline{CF}$ is congruent to ________.

________ is congruent to ________.

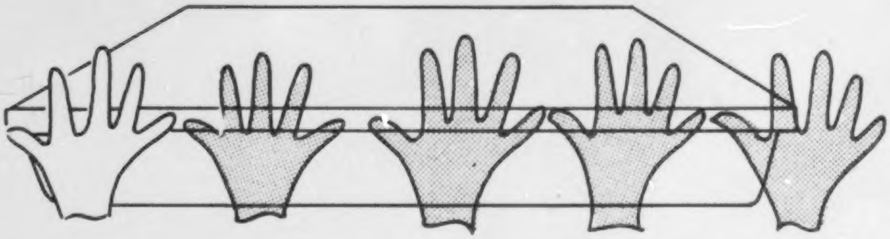
Units of Length

1.



This desk is between ______ and ______ pencils long.

2.



This desk is between ______ and ______ hand-spans long.

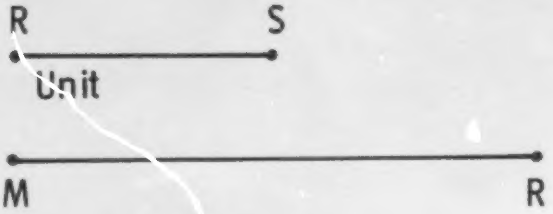
3.

My desk is between ______ and ______ pencils long.

My desk is between ______ and ______ hand-spans long.

Measure and Length

1.



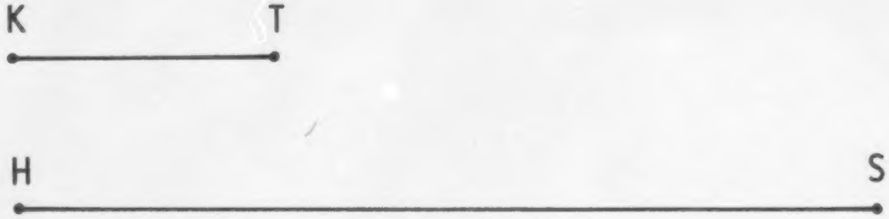
The unit is ________.

The measure of $\overline{RS}$ is ________.

The length of $\overline{MR}$ is ________ units.

The measure of $\overline{MR}$ is ________.

2.



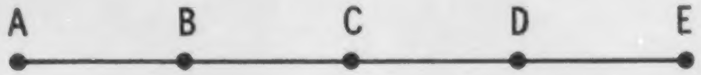
The unit is ________.

The measure of $\overline{KT}$ is ________.

The length of $\overline{HS}$ is ________ units.

The measure of $\overline{HS}$ is ________.

3.



$\overline{AB}$ is the unit.

The length of $\overline{AC}$ is ____________.

The measure of $\overline{AC}$ is ________.

The length of $\overline{AD}$ is ____________.

The measure of $\overline{AD}$ is ________.

The measure of $\overline{BE}$ is ________.

The length of $\overline{BE}$ is ____________.

The measure of $\overline{CE}$ is ________.

The length of $\overline{CE}$ is ____________.

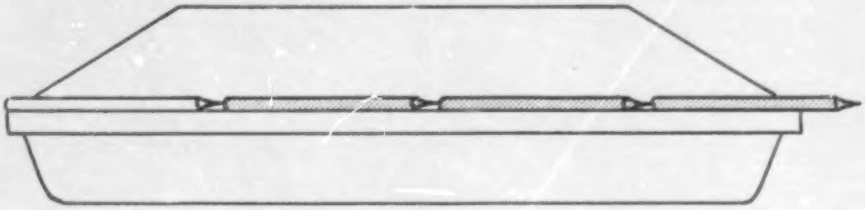
$\overline{BE}$ is congruent to ________.

$\overline{CE}$ is congruent to ______, and ______.

$\overline{ED}$ is congruent to ______, ______ and ______.

Length to the Nearest Unit

1.



The length of the desk is more than ________ pencils.

The measure of the desk is greater than ________.

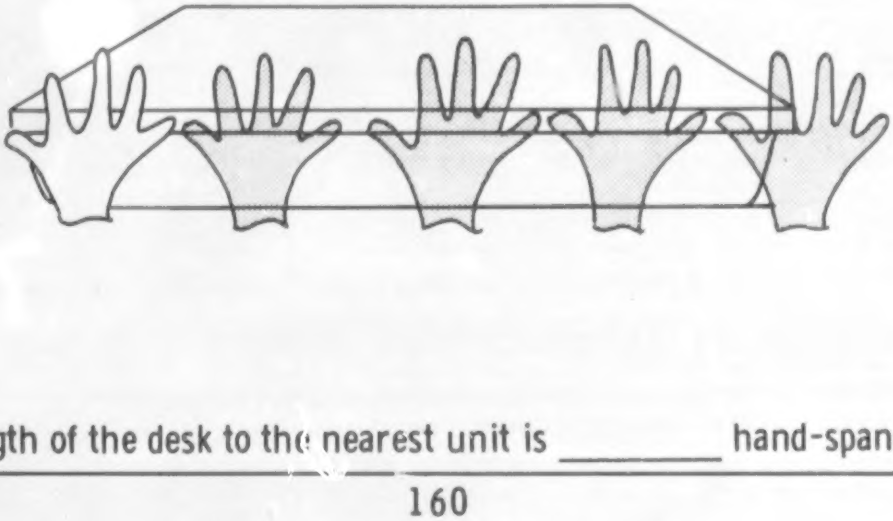
The length of the desk is between _______ and _______ pencils.

The measure of the desk is between _______ and _______.

The measure of the desk is nearer to ________ than to ________.

The length of the desk to the nearest pencil unit is ________ pencils.

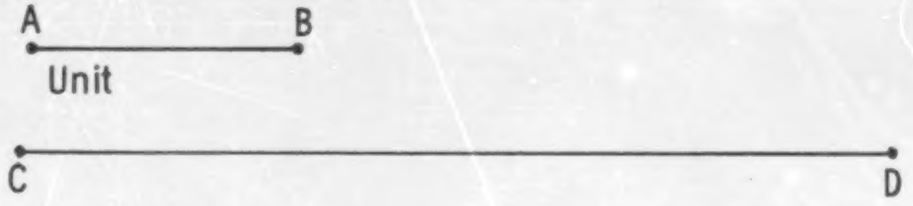
2.



The length of the desk to the nearest unit is ________ hand-spans.

Length to the Nearest Unit

3.



The length of $\overline{CD}$ is greater than ________ units.

The measure of $\overline{CD}$ is greater than ________.

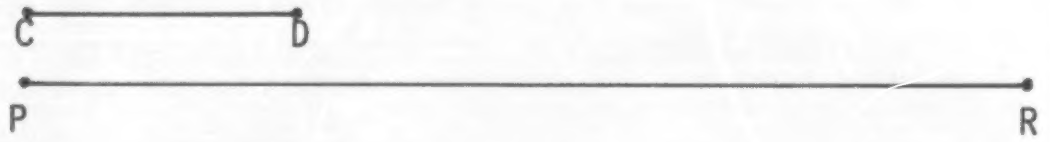
The measure of $\overline{CD}$ is less than ________.

The length of $\overline{CD}$ is less than ________ units.

The length of $\overline{CD}$ is nearer to ______ units than to ______ units.

The length of $\overline{CD}$ to the nearest unit is ________ units.

4.



The length of $\overline{RP}$ is greater than ________ units.

The measure of $\overline{RP}$ is greater than ________.

The length of $\overline{RP}$ is less than ________ units.

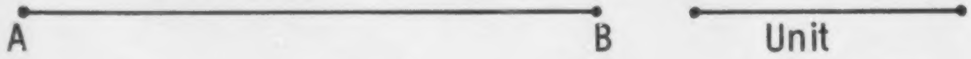
The measure of $\overline{RP}$ is less than ________.

The length of $\overline{RP}$ is nearer to ________ than to ________ units.

The length of $\overline{RP}$ to the nearest unit is ________ units.

Length to the Nearest Unit

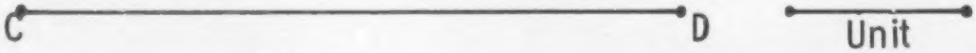
5.



The length of $\overline{AB}$ to the nearest unit is ________ units.

The measure of $\overline{AB}$ to the nearest unit is ________.

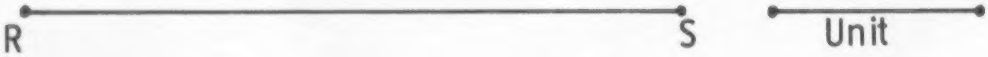
6.



The length of $\overline{CD}$ to the nearest unit is ________ units.

The measure of $\overline{CD}$ to the nearest unit is ________.

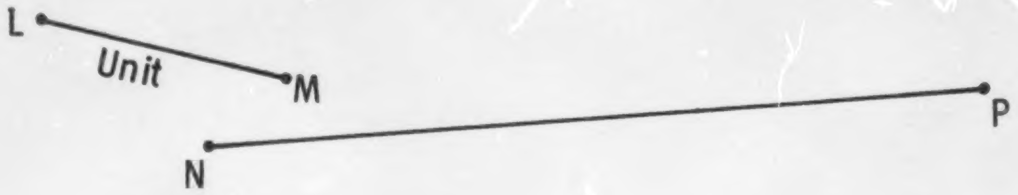
7.



The length of $\overline{RS}$ to the nearest unit is ________ units.

Length to the Nearest Unit

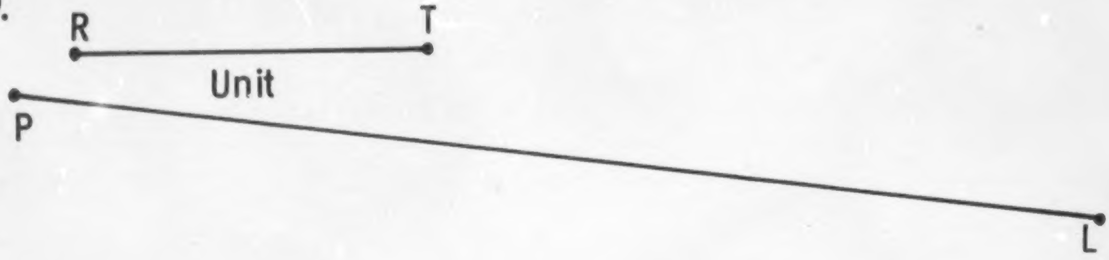
8.



The measure of $\overline{NP}$ to the nearest unit is ________.

The length of $\overline{NP}$ to the nearest unit is ________ units.

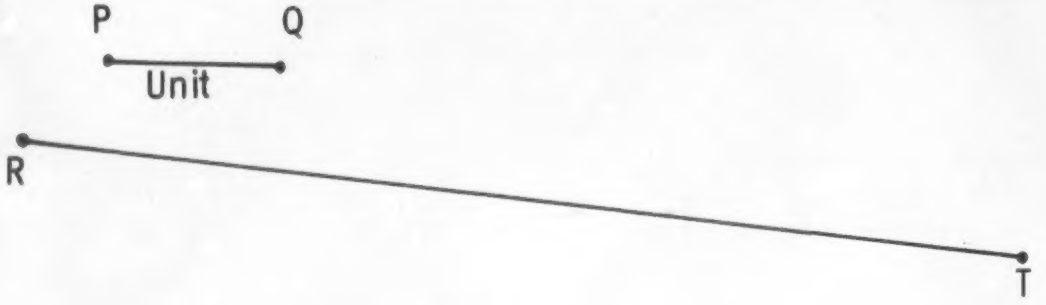
9.



The length of $\overline{LP}$ to the nearest unit is ________ units.

The measure of $\overline{LP}$ to the nearest unit is ________.

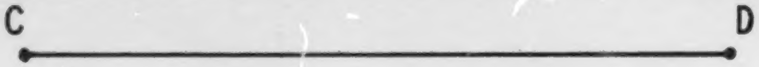
10.

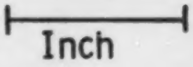


The length of $\overline{TR}$ to the nearest unit is ________ units.

Using a Standard Unit of Length

1.

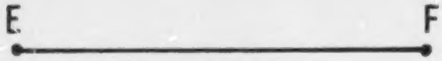




The measure of $\overline{CD}$ is 4.

$\overline{CD}$ is 4 inches long.

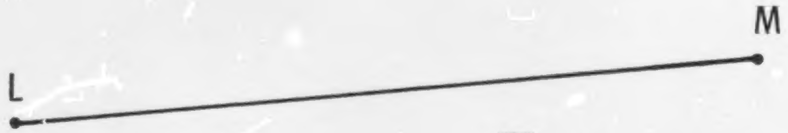
2.



The measure of $\overline{EF}$ is ______.

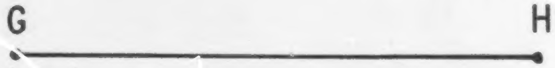
The length of $\overline{EF}$ is _____ inches.

3.



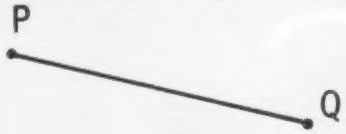
$\overline{LM}$ is ________ inches long.

4.



Length of $\overline{GH}$ is ________ inches.

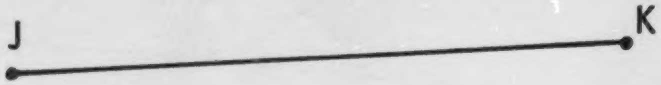
5.



Length of $\overline{PQ}$ is ________ inches.

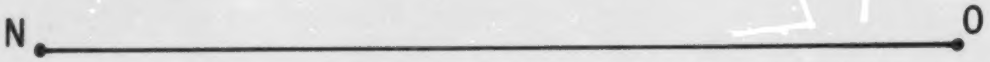
Using a Standard Unit of Length

6.



$\overline{KJ}$ is ________ inches long.

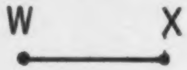
7.



The measure of $\overline{ON}$ is ________.

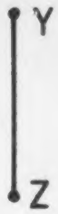
The measure of $\overline{NO}$ is ________.

8.



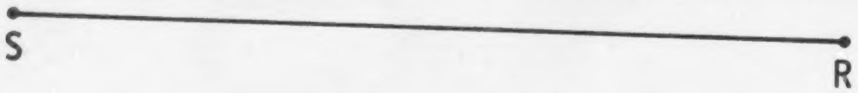
The length of $\overline{WX}$ is ________.

9.



$\overline{YZ}$ is ________ inches long.

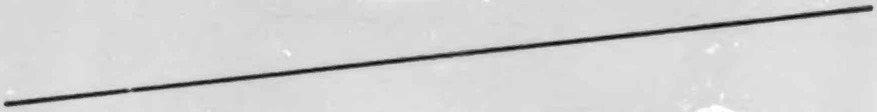
10.



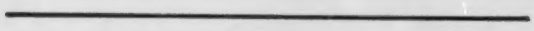
The length of $\overline{RS}$ is ________ inches.

The length of $\overline{SR}$ is ________.

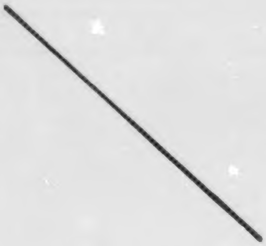
Linear Scale

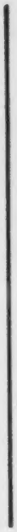


________ inches

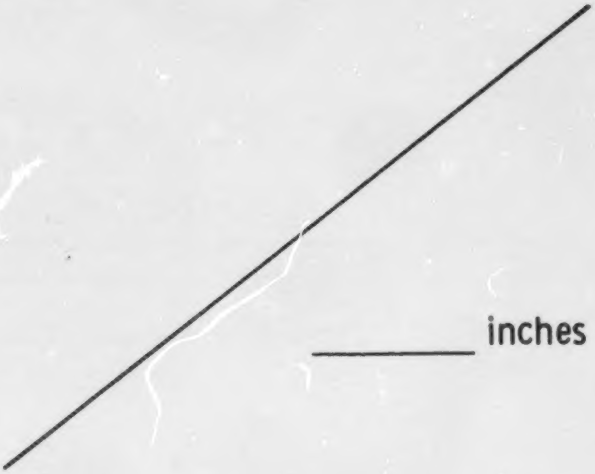


________ inches





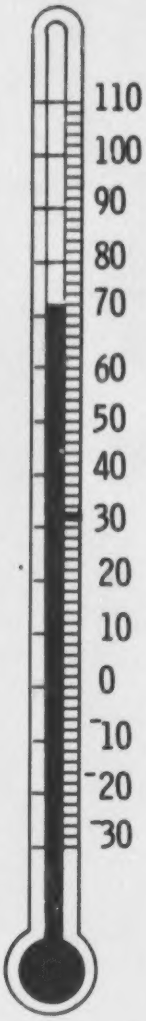
________ inches

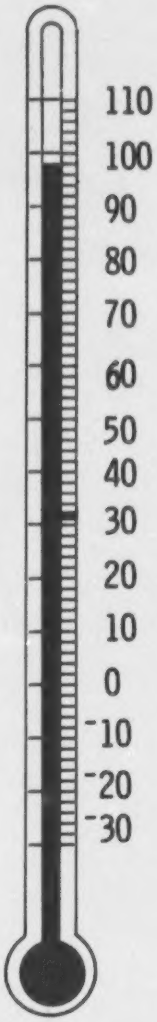


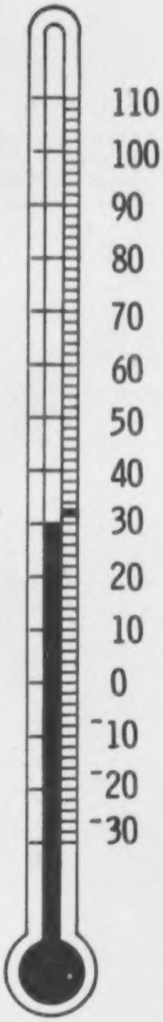
________ inches

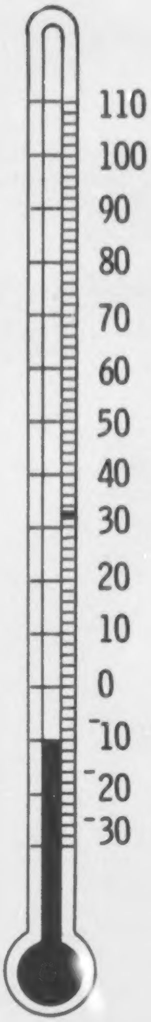
________ inches

Writing Temperatures


110
100
90
80
70
60
50
40
30
20
10
0
⁻10
⁻20
⁻30


110
100
90
80
70
60
50
40
30
20
10
0
⁻10
⁻20
⁻30


110
100
90
80
70
60
50
40
30
20
10
0
⁻10
⁻20
⁻30


110
100
90
80
70
60
50
40
30
20
10
0
⁻10
⁻20
⁻30

_______ ° _______ ° _______ ° _______ °

Which temperature is warmest? _________

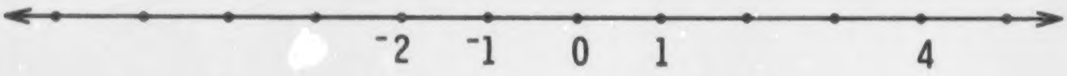
Which temperatures are below freezing? _________ _________

Which temperature is coldest? _________

Which temperature is nearest to the temperature of our room? _________

Using Negative Numbers

Write the missing numbers



Write < or >.

35	22	14	16	98	67
2	0	7	8	17	35
2	$^{-}1$	$^{-}1$	0	42	13
$^{-}3$	3	5	3	5	$^{-}5$
$^{-}6$	2	$^{-}5$	3	6	$^{-}2$
$^{-}22$	$^{-}35$	4	$^{-}42$	51	$^{-}49$
15	$^{-}213$	$^{-}78$	20	$^{-}498$	2
1	0	$^{-}65$	$^{-}64$	$^{-}21$	$^{-}22$
46	$^{-}29$	475	$^{-}569$	$^{-}757$	$^{-}38$
$^{-}3$	0	15	$^{-}32$	$^{-}68$	$^{-}64$
82	$^{-}82$	82	83	$^{-}83$	82
$^{-}212$	0	$^{-}423$	$^{-}424$	6	$^{-}6$
51	$^{-}54$	$^{-}72$	79	$^{-}724$	72

Renaming Numbers

		Hundreds	Tens	Ones		Tens	Ones
165	is	1	6	5	or	16	5
210	is				or		
198	is				or		
____	is	1	4	7	or		
____	is				or	23	5
73	is				or		
321	is				or		
150	is				or		
223	is				or		
____	is	2	8	6	or		
182	is				or		
____	is				or	36	5

Renaming Numbers

Fill the blanks.

145 = 100 + 40 + 5

213 = ____ + ____ + ____

___ = 100 + 60 + 8

196 = ____ + ____ + ____

457 = ____ + ____ + ____

394 = ____ + ____ + ____

___ = 100 + 40 + 0

180 = ____ + ____ + ____

253 = ____ + ____ + ____

124 = ____ + ____ + ____

___ = 200 + 70 + 9

177 = ____ + ____ + ____

159 = ____ + ____ + ____

210 = ____ + ____ + ____

145 = 140 + 5

213 = _____ + _____

___ = 160 + 8

196 = _____ + _____

457 = _____ + _____

394 = _____ + _____

___ = 140 + 0

180 = _____ + _____

253 = _____ + _____

124 = _____ + _____

___ = 270 + 9

177 = _____ + _____

159 = _____ + _____

210 = _____ + _____

Addition

4 tens and 8 tens are ________ tens.

40 + 80 = ________

$$\begin{array}{r}40\\ \underline{80}\\ 120\end{array}$$

7 tens and 6 tens are ________ tens.

70 + 60 = ________

$$\begin{array}{r}70\\ \underline{60}\end{array}$$

3 tens and 9 tens are ________ tens.

30 + 90 = ________

$$\begin{array}{r}30\\ \underline{90}\end{array}$$

5 tens and 8 tens are ________ tens.

50 + 80 = ________

$$\begin{array}{r}50\\ \underline{80}\end{array}$$

9 tens and 7 tens are ________ tens.

90 + 70 = ________

$$\begin{array}{r}90\\ \underline{70}\end{array}$$

4 tens and 6 tens are ________ tens.

40 + 60 = ________

$$\begin{array}{r}40\\ \underline{60}\end{array}$$

8 tens and 9 tens are ________ tens.

80 + 90 = ________

$$\begin{array}{r}80\\ \underline{90}\end{array}$$

Subtraction

Start with 15 tens. Remove 7 tens.
You have ________ tens left.
150 - 70 = ________

$$\begin{array}{r} 150 \\ -\ 70 \\ \hline \end{array}$$

Start with 16 tens. Remove 8 tens.
You have ________ tens left.
160 - 80 = ________

$$\begin{array}{r} 160 \\ -\ 80 \\ \hline \end{array}$$

Start with 14 tens. Remove 8 tens.
You have ________ tens left.
140 - 80 = ________

$$\begin{array}{r} 140 \\ -\ 80 \\ \hline \end{array}$$

Start with 12 tens. Remove 5 tens.
You have ________ tens left.
120 - 50 = ________

$$\begin{array}{r} 120 \\ -\ 50 \\ \hline \end{array}$$

Start with 13 tens. Remove 9 tens.
You have ________ tens left.
130 - 90 = ________

$$\begin{array}{r} 130 \\ -\ 90 \\ \hline \end{array}$$

Start with 11 tens. Remove 5 tens.
You have ________ tens left.
110 - 50 = ________

$$\begin{array}{r} 110 \\ -\ 50 \\ \hline \end{array}$$

Addition and Subtraction

Write each problem another way. Fill the blanks.

30 + 80 = _______ 30 80 110	130 - 70 = _______ 130 70 60	50 + 50 = _______
70 + 80 = ____ ____	160 - 70 = _______	150 - 90 = _______
140 - 50 = _______	60 + 60 = _______	80 + 40 = _______
100 - 70 = _______	110 - 40 = _______	160 - 80 = _______

Addition

34 + 83 = 117

30 + 4
80 + 3
110 + 7

76 + 82 = ________

70 + 6
80 + 2

54 + 92 = ________

80 + 47 = ________

75 + 63 = ________

91 + 84 = ________

82 + 57 = ________

78 + 30 = ________

Subtraction

176 - 85 = -----

170 + 6
-(80 + 5)
----

144 - 73 = -----

140 + 4
-(70 + 3)
----

109 - 63 = -----

100 + 9
-(60 + 3)
----

167 - 86 = -----

160 + 7
- (80 + 6)
----

128 - 74 = -----

185 - 92 = -----

169 - 94 = -----

113 - 40 = -----

Addition

12 45 7 50 57	34 92 8 120 128	36 61
63 24	47 22	64 43
59 70	75 21	21 66
85 32	53 83	92 65

Addition

55 + 8 = _____

You may do this:

$$\begin{array}{l} 50 + 5 \\ \underline{8} \\ 50 + 13 \\ 50 + 10 + 3 = 63 \end{array}$$

You may do this:

$$\begin{array}{r} 55 \\ \underline{8} \\ 13 \\ \underline{50} \\ 63 \end{array} \quad \text{or} \quad \begin{array}{r} 55 \\ \underline{8} \\ 50 \\ \underline{13} \\ 63 \end{array}$$

Use the way you like best.

42 + 8 = _____	26 + 7 = _____
45 + 9 = _____	57 + 4 = _____

Addition

72 + 19 = _____

You may do this:

$$\begin{array}{l} 70 + 2 \\ \underline{10 + 9} \\ 80 + 11 = 91 \end{array}$$

You may do this:

$$\begin{array}{r} 72 \\ \underline{19} \\ 11 \\ \underline{80} \\ 91 \end{array} \quad \text{or} \quad \begin{array}{r} 72 \\ \underline{19} \\ 80 \\ \underline{11} \\ 91 \end{array}$$

Use the way you like best.

46 + 47 = _____	24 + 56 = _____
73 + 17 = _____	39 + 61 = _____

Addition

35 + 48 = _____

$$\begin{array}{r} 30 + 5 \\ \underline{40 + 8} \end{array} \qquad \text{or} \qquad \begin{array}{r} 35 \\ \underline{48} \end{array}$$

Use the way you like best.

29 + 46 = _____	67 + 49 = _____
58 + 25 = _____	13 + 48 = _____
64 + 38 = _____	37 + 45 = _____

Addition

28 + 89 = -----

76 + 57 = -----

63 + 27 = -----

38 + 56 = -----

18 + 88 = -----

45 + 65 = -----

92 + 16 = -----

82 + 49 = -----

Addition

Use the way you like best.

28 + 42 + 53 = _____	37 + 62 + 36 = _____
14 + 39 + 54 = _____	71 + 28 + 55 = _____
36 + 79 + 42 = _____	30 + 47 + 59 = _____

Addition

44 + 57 + 38 = _____

69 + 95 + 33 = _____

15 + 90 + 27 = _____

41 + 14 + 98 = _____

33 + 52 + 45 = _____

26 + 74 + 98 = _____

Subtraction

Think what fact you will use. Then rename.

Fill the blanks.

42 - 7 = _____ 42 30 + 12 -7 — 7 __ _________	78 - 3 = _____ 78 70 + 8 -3 — 3 __ _________
21 - 9 = _____	73 - 8 = _____
86 - 6 = _____	35 - 8 = _____
54 - 5 = ____	45 - 3 = _____

Subtraction

Think what fact you will use. Then rename.

Fill the blanks.

88 - 9 = _____

26 - 8 = _____

67 - 6 = _____

74 - 6 = _____

46 - 7 = _____

95 - 7 = _____

32 - 5 = _____

27 - 9 = _____

Subtraction

Rename in a way that is helpful. Fill the blank in the equation.

95 - 39 = _____

32 - 16 = _____

56 - 28 = _____

77 - 39 = _____

48 - 46 = _____

80 - 53 = _____

63 - 49 = _____

27 - 13 = _____

Subtraction

Rename in a way that is helpful. Fill the blank.

96 - 38 = _____

82 - 45 = _____

60 - 26 = _____

77 - 58 = _____

93 - 27 = _____

82 - 24 = _____

71 - 58 = _____

86 - 79 = _____

Doing and Undoing

Find n. Show your work here.

n + 55 = 81

n = 81 - 55 ________________

n = __________

n - 36 = 49

n = ________________

n = __________

n - 21 = 39

n = ________________

n = __________

n + 49 = 92

n = ________________

n = __________

Doing and Undoing

Find n. Show your work here .

88 - n = 59

n = ________________

n = __________

17 + n = 85

n = ________________

n = __________

n - 38 = 75

n = ________________

n = __________

78 - n = 35

n = ________________

n = __________

*Two Step Problems

Find n.

n - 8 = 7 + 6 n = __________	7 + 8 + n = 31 n = __________
75 - n = 21 + 16 n = __________	(52 + n) - 13 = 61 n = __________
26 + 49 + n = 129 n = __________	n - 10 = 35 + 28 + 52 n = __________

Solving Problems

Write the equation.

Use n for the number you do not know.

1. Sam had some balls.
He got 2 more balls. ____________
Now he has 6 balls. ____________
How many balls did Sam have at first? ____________

Sam had ________ balls at first.

2. Mary had 7 books. ____________
Sam took 2 books. ____________
How many books did Mary have then?
____

Mary had ________ books then.

3. Jimmy had 3 cookies. ____________
Mother gave him some cookies.
Then he had 8 cookies. ____________
How many cookies did Mother give to Jimmy? ____________

Mother gave ________ cookies to Jimmy.

Solving Problems

Which equation is related to the story?

Cross out the one that does not belong.

1. Billy had 6 apples.
He gave 2 apples to Jane.
How many apples does Billy have now?

$2 + n = 6$

$6 + 2 = n$

____

____

Billy has ________ apples now.

2. Beth had some toys.
She gave 3 toys to her little brother.
Then she had 4 toys.
How many toys did she have at first?

$n - 3 = 4$

$n + 3 = 4$

____

____

Beth had ________ toys at first.

3. John had 8 cents.
He found some cents.
Then he had 10 cents.
How many cents did he find?

$8 + n = 10$

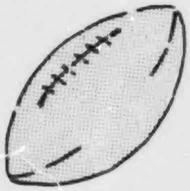
$8 + 10 = n$

____

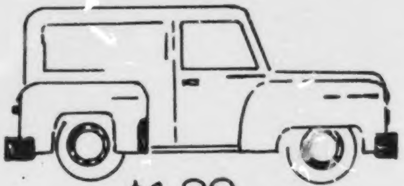
____

John found ________ cents.

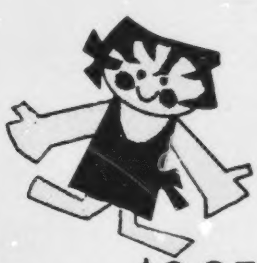
TOYS



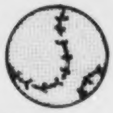
$4.49



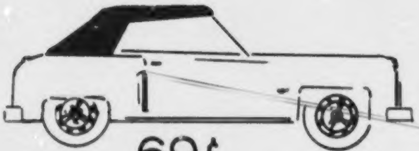
$1.89



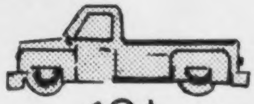
$9.95



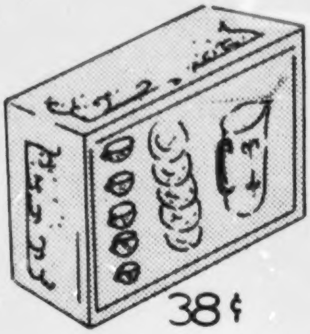
79¢



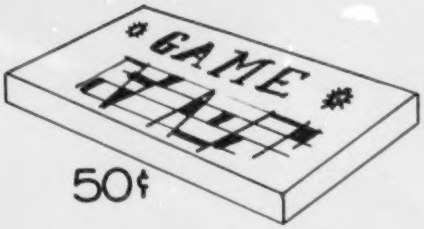
69¢



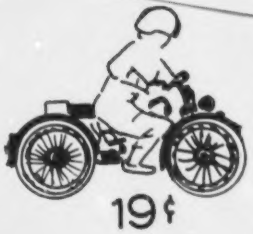
10¢



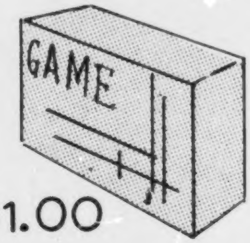
38¢



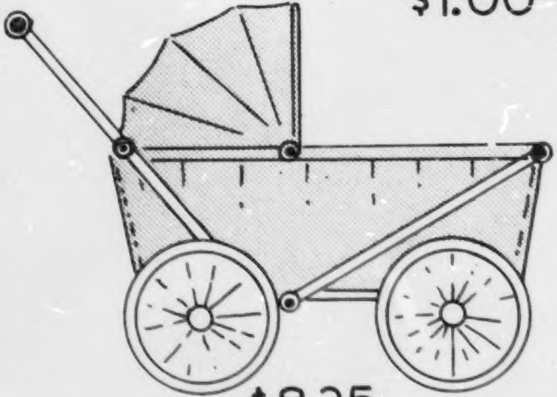
50¢



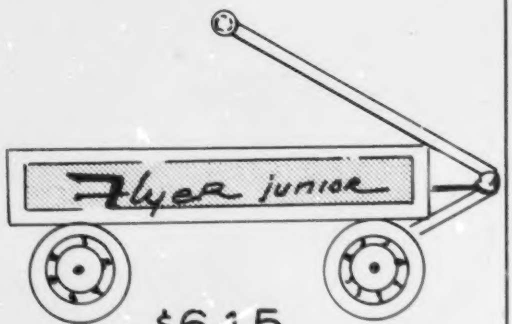
19¢



$1.00



$8.25


Flyer junior

$6.15

Money

What amounts of money are shown?

Write each, using numerals and money signs.

sixty-nine cents ____________

nineteen cents ____________

six dollars and fifteen cents ____________

thirty-eight cents ____________

ten cents ____________

four dollars and forty-nine cents ____________

one dollar and eighty-nine cents ____________

fifty cents ____________

eight dollars and twenty-five cents ____________

seventy-nine cents ____________

one dollar ____________

Steve had saved $.55. He wanted to buy a ball that cost $.89. How much more money did he need?

____

____

____

Steve needed __________________ more.

Kathy bought doll dishes for 49¢ and a cookie set for 79¢. How much did both things together cost?

____

____

____

Both things together cost _______________.

When Larry went to the toy store, he had 50¢. He bought a horn. The man at the store gave him 11¢ change. How much did the horn cost?

____

____

____

The horn cost ___________.

Scott took a toy truck and a 25¢ car to the check-out counter. The truck did not have a price mark on it. The girl at the counter said, "Sixty-two cents, please." What was the price of the truck?

____

____

____

The price of the truck was _______________.

Betty had a stamp album. Before Christmas she had 82 stamps in it. Her brother gave her 25 stamps for Christmas. How many stamps did she have then?

____

____

____

Betty had ____________ stamps.

Jim's airplane needed paint. He bought some paint for 19¢. How much change did he get from a quarter?

____

____

____

He got _______________ change.

David bought a boat for 49¢. Jack bought a boat for 98¢. How much more did Jack's boat cost than David's?

Jack's boat cost ________ more than David's.

Aunt Sally bought some toys for her sister's new baby. She paid 35¢ for a rattle, 25¢ for a duck, and 98¢ for a stuffed bear. How much did she spend for the toys?

She spent ____________ for the toys.

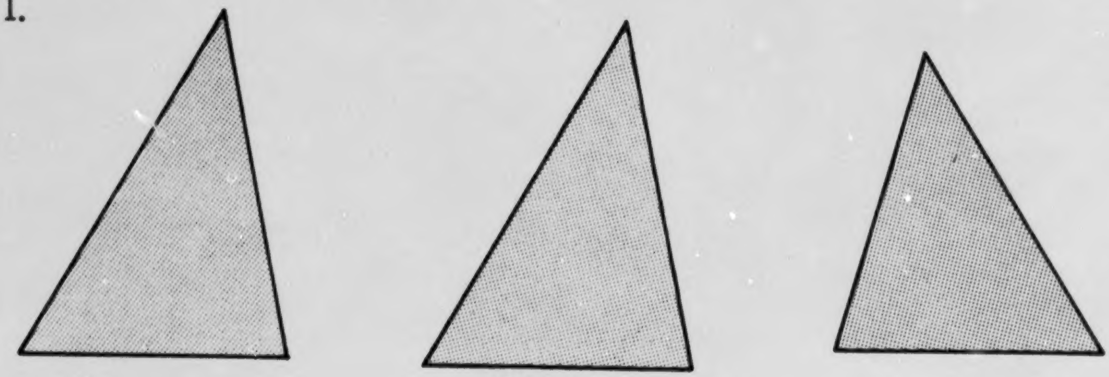
Dick had saved $1.75. After he spent 98¢ for a baseball and 49¢ for a kite, how much money did he have?

He had ____________.

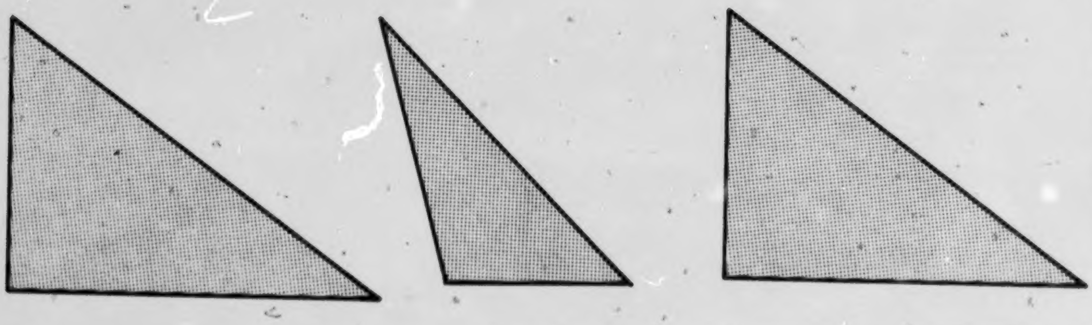
Congruence of Triangular Regions

In each row mark the two regions that are congruent.

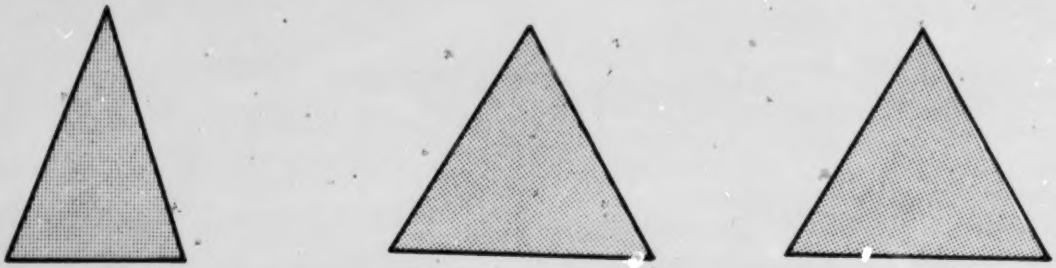
1.



2.

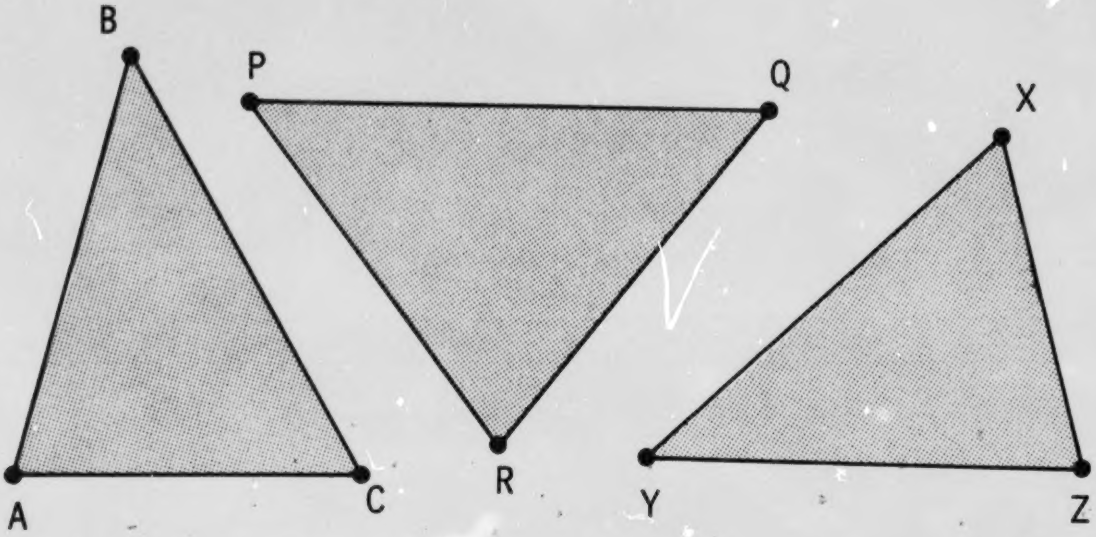


3.



4. Make a tracing of △ABC.

Mark the points A, B, C on the tracing.



Line segment $\overline{AB}$ is congruent to ________ and to ________.

Line segment $\overline{BC}$ is congruent to ________.

Line segment $\overline{CA}$ is congruent to ________.

△ABC is congruent to ________.

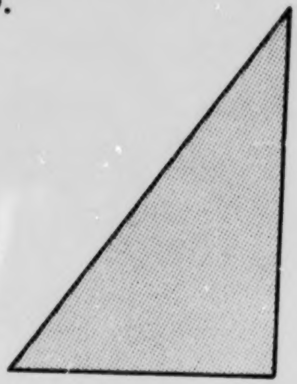
The inside of △ABC is congruent to the inside of ________.

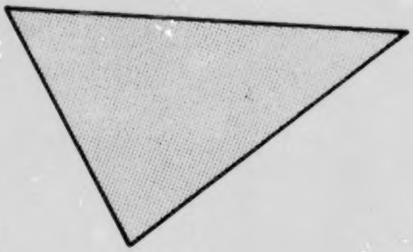
The triangular region ABC is congruent
to the triangular region ________.

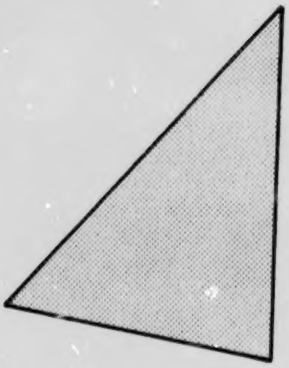
Congruence of Triangular Regions

In each row mark the two regions that are congruent.

5.







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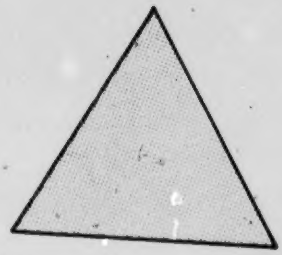
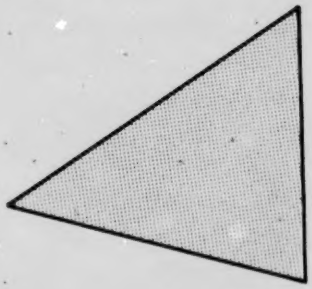
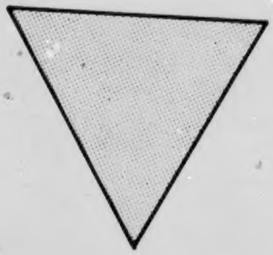
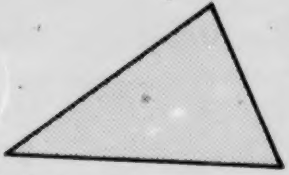
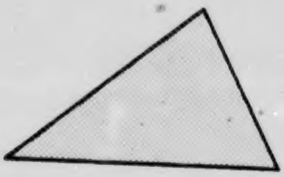


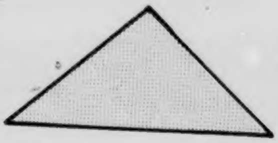




7.

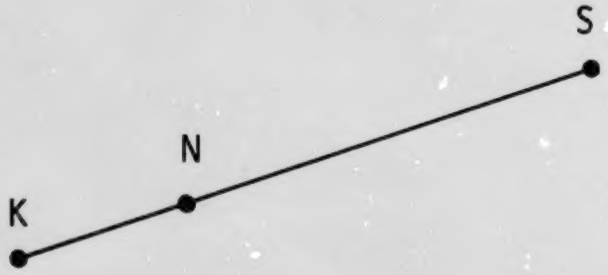






Review

1. Line segment $\overline{KS}$ is shown below.

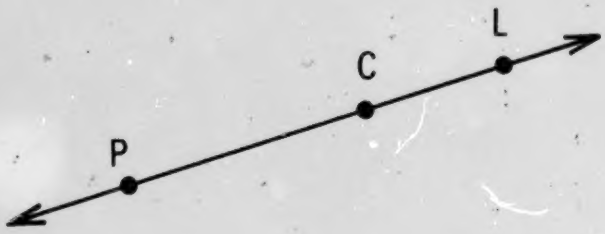


Write names for two other line segments. _____ _____

Is $\overline{KN}$ part of $\overline{KS}$? Yes No

Is $\overline{KN}$ part of $\overline{NS}$? Yes No

2. Line $\overleftrightarrow{CL}$ is shown below.

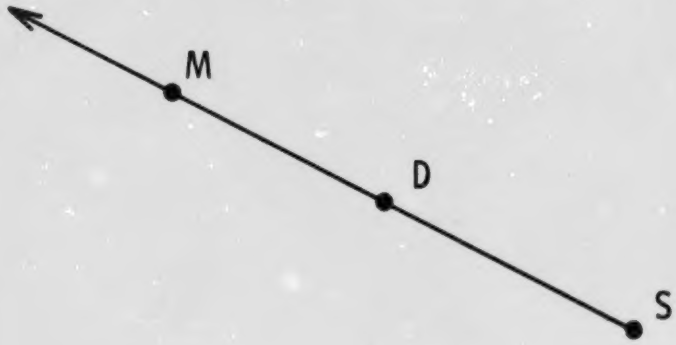


Write four more names for this line. ___ ___ ___ ___

Is line segment $\overline{CL}$ part of line $\overleftrightarrow{CL}$? Yes No

Is $\overline{PC}$ part of $\overleftrightarrow{CL}$? Yes No

1. Ray $\overrightarrow{SM}$ is shown below.



Write another name for $\overrightarrow{SM}$. ________

Name the endpoint of $\overrightarrow{SM}$. ________

Is the endpoint named first? Yes No

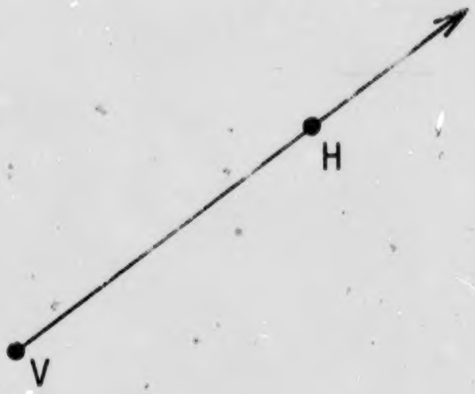
2.	How many endpoints does a line segment have?	None	1	2
	How many endpoints does a line have?	None	1	2
	How many endpoints does a ray have?	None	1	2

3. Here is ray $\overrightarrow{VH}$.

Draw two more rays with V as endpoint.

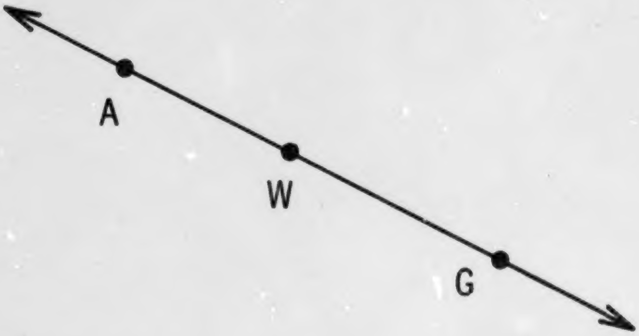
Mark another point F on one ray you drew.

Mark another point L on the other ray you drew.



Name the rays you drew. ________ ________

4. Here is line $\overleftrightarrow{AG}$.

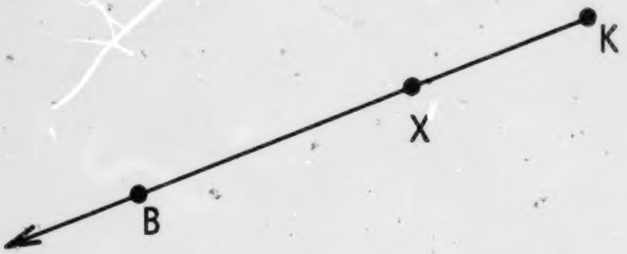


Is ray $\overrightarrow{GA}$ the same as ray $\overrightarrow{AG}$? Yes No

Is $\overrightarrow{AW}$ the same as $\overrightarrow{AG}$? Yes No

Is line segment $\overline{AW}$ part of ray $\overrightarrow{AG}$? Yes No

5. Here is ray $\overrightarrow{KB}$.

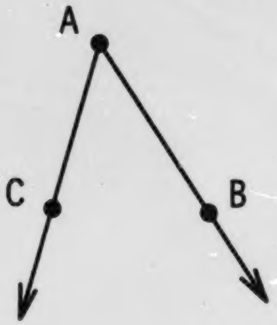


Is $\overrightarrow{XB}$ the same as $\overrightarrow{KB}$? Yes No

Is line segment $\overline{XB}$ part of ray $\overrightarrow{KB}$? Yes No

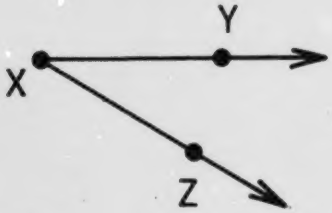
Is line segment $\overline{KB}$ part of ray $\overrightarrow{KB}$? Yes No

1. In each angle, name the vertex and the rays.



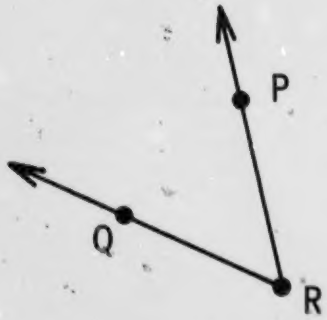
vertex ______

rays ______ ______



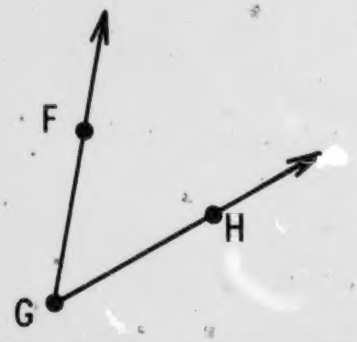
vertex ______

rays ______ ______



vertex ______

rays ______ ______

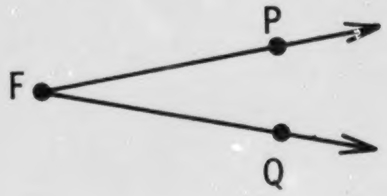


vertex ______

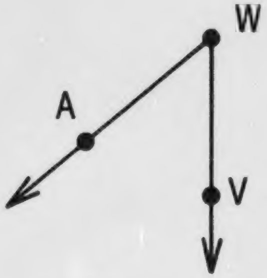
rays ______ ______

Angles

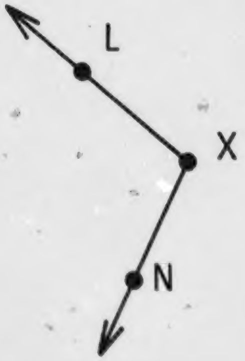
2. Write two names for each angle.



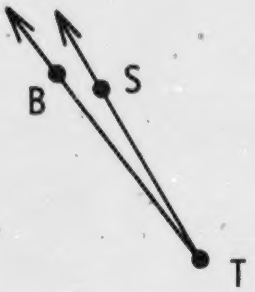
________ ________



________ ________



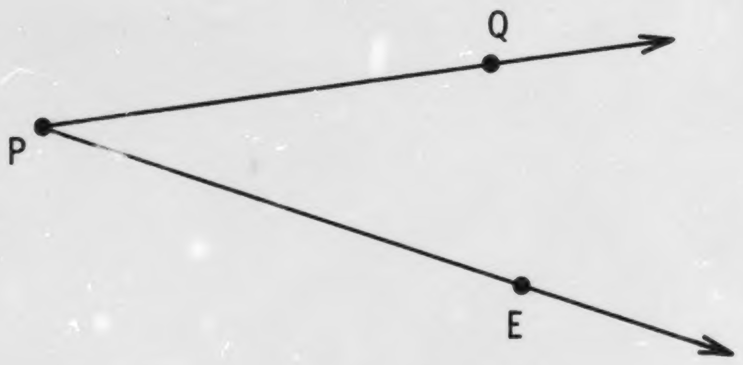
________ ________



________ ________

3. Name the vertex of the angle. ______

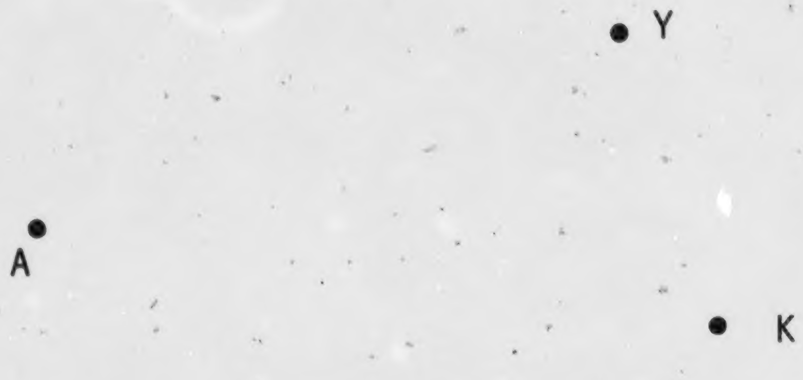
Write two names for the angle. ____________ ____________



Mark another point R on $\overrightarrow{PE}$.

Write two more names for the angle. ____________ ____________

4. Draw triangle △ AYK.

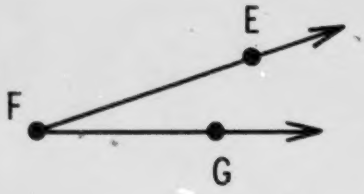


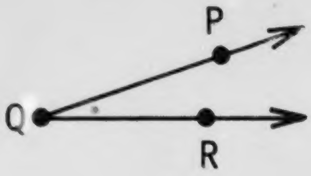
Name three angles whose corners are shown. ______ ______ ______

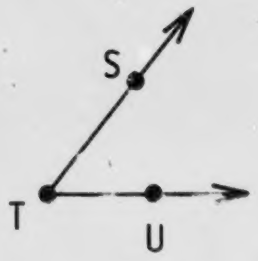
Congruence of Angles

Find out by tracing.

1.

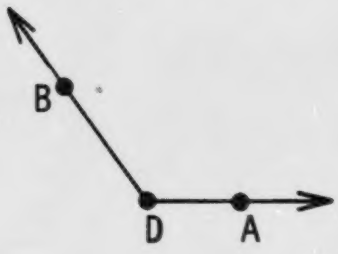


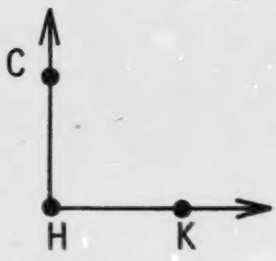


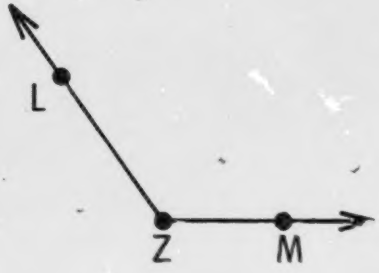


∠ EFG is congruent with ________.

2.





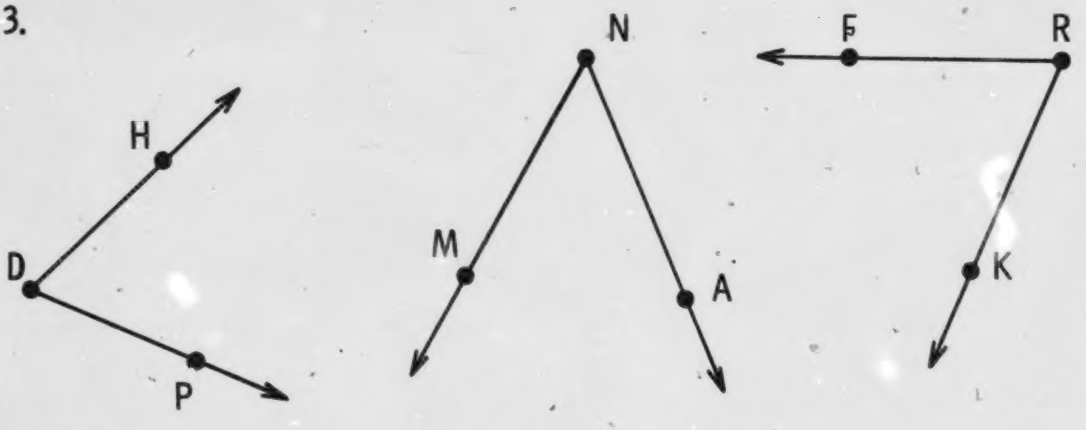


∠BDA is congruent with ________.

Congruence of Angles

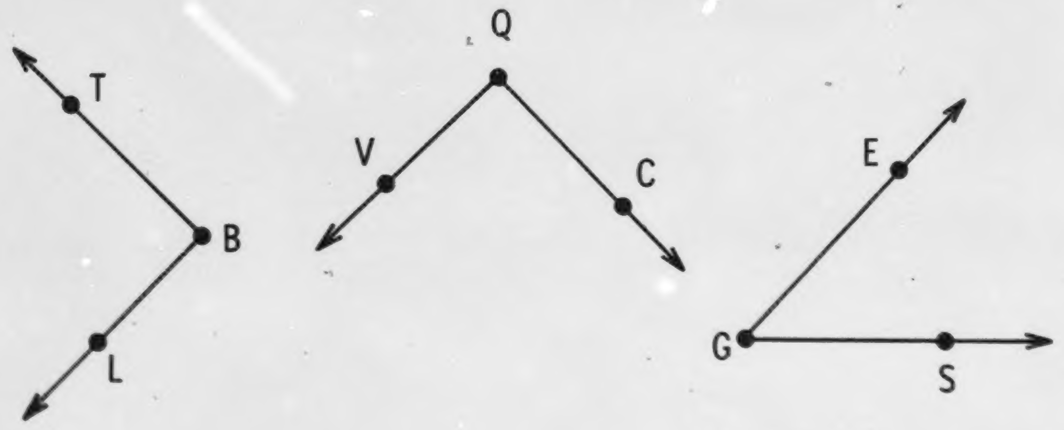
Find out by tracing.

3.



∠ HDP is congruent with ________.

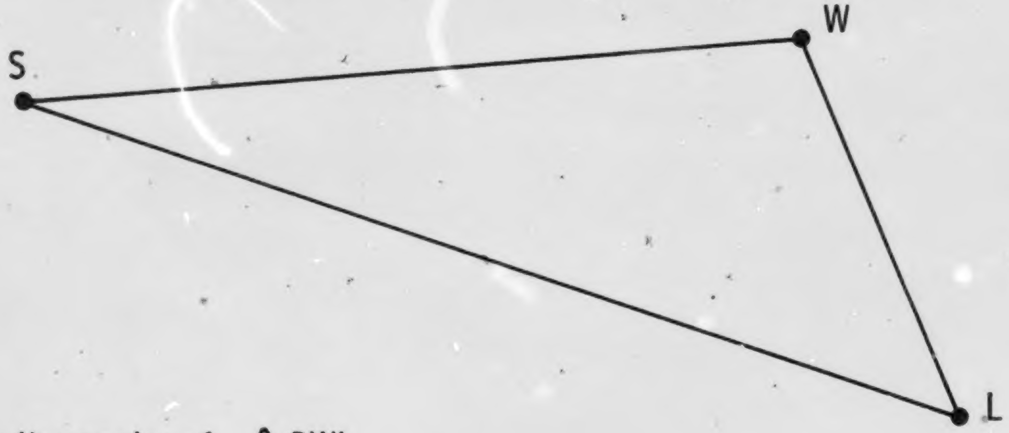
4.



∠ TBL is congruent with ________.

Congruence of Angles

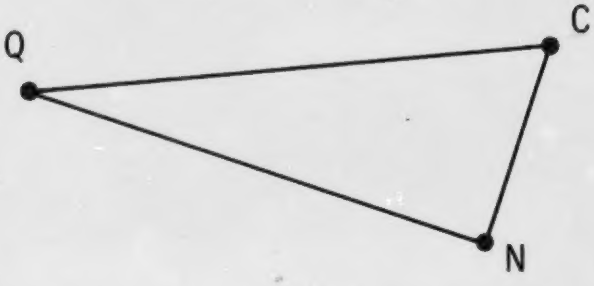
5.



Name the angles of $\triangle SWL$.

__________ __________ __________

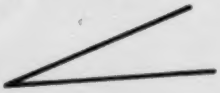
6.

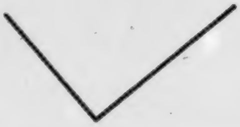


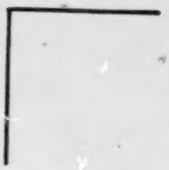
$\angle CQN$ is congruent with __________.

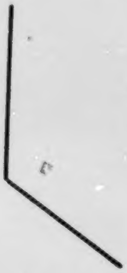
Right Angles

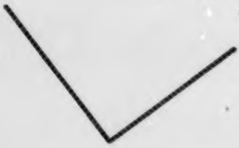
1. Mark each right angle.

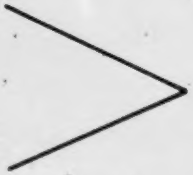


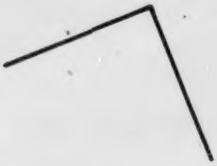


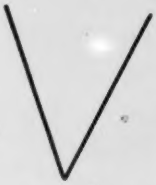




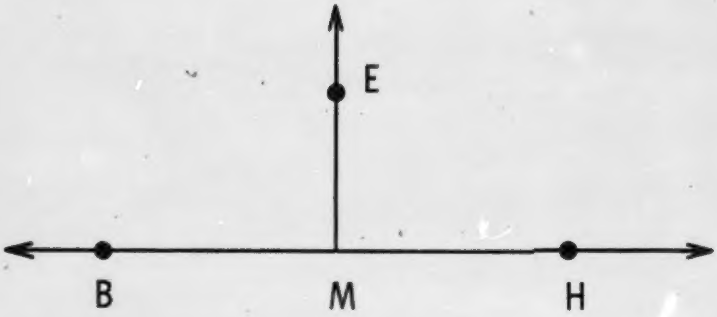






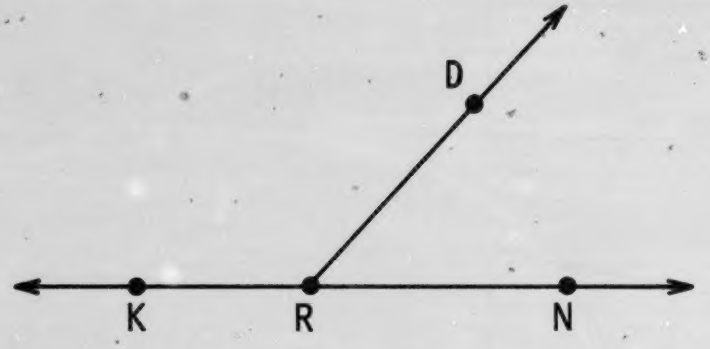


2.



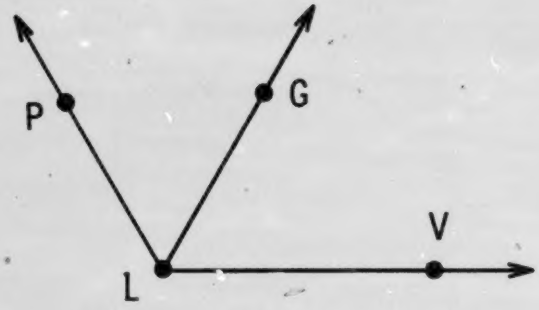
Is $\angle EMH$ congruent with $\angle EMB$?	Yes	No
Do B, M and H lie on a line?	Yes	No
Is $\angle EMH$ a right angle?	Yes	No
Is $\angle EMB$ a right angle?	Yes	No

3.



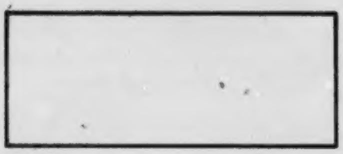
Do K, R, and N lie on a line?	Yes	No
Is ∠DRN congruent with ∠DRK?	Yes	No
Is ∠DRN a right angle?	Yes	No
Is ∠DRK a right angle?	Yes	No

4.

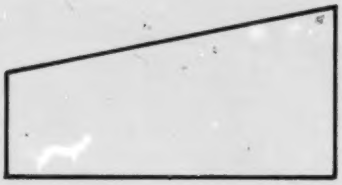


Is ∠GLV congruent with ∠GLP?	Yes	No
Do P, L, and V lie on a line?	Yes	No
Is ∠GLV a right angle?	Yes	No
Is ∠GLP a right angle?	Yes	No

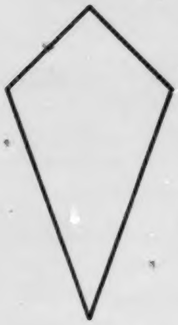
5. How many right angles does each polygon have?



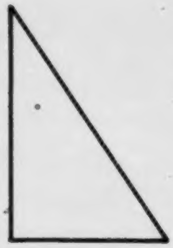
None 1 2 3 4



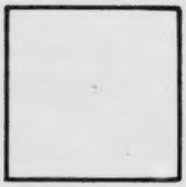
None 1 2 3 4



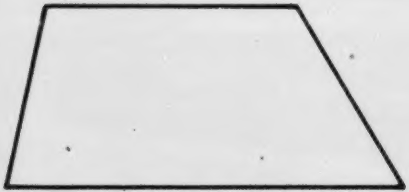
None 1 2 3 4



None 1 2 3 4

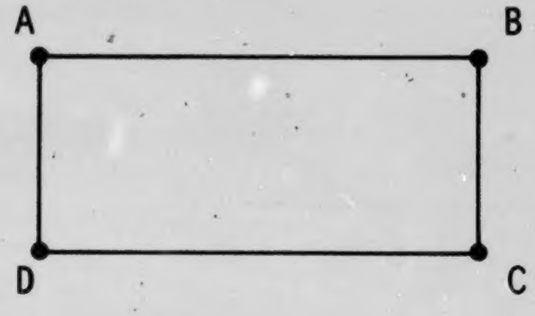


None 1 2 3 4



None 1 2 3 4

1. Here is a rectangle.



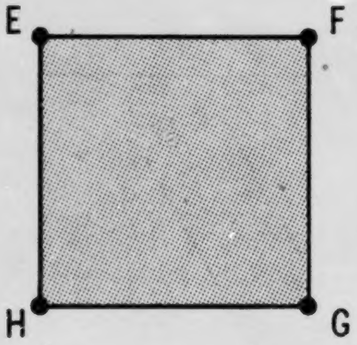
$\overline{AB}$ is congruent with ________.

$\overline{AD}$ is congruent with ________.

Is $\overline{AB}$ congruent with $\overline{AD}$? Yes No

Is the rectangle a square? Yes No

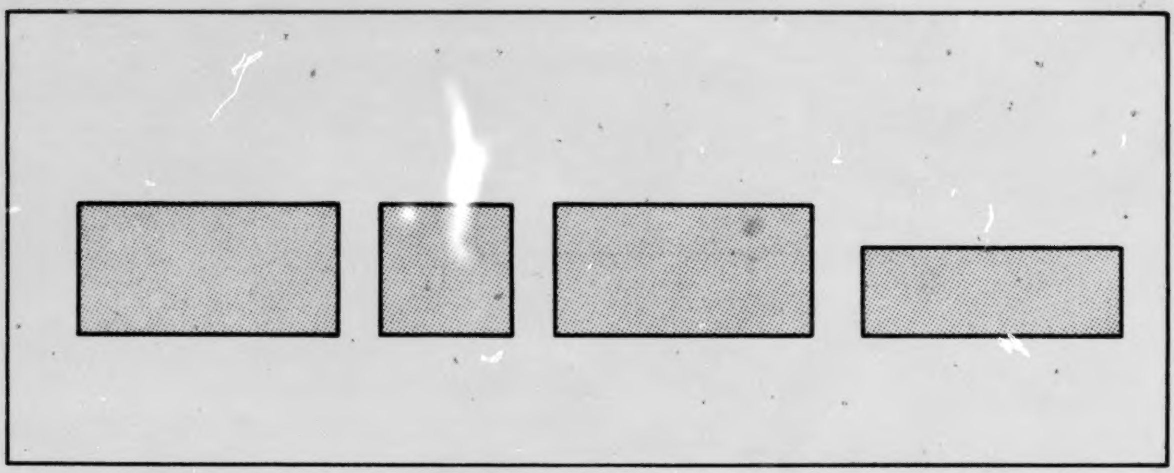
2. Here is a square region.

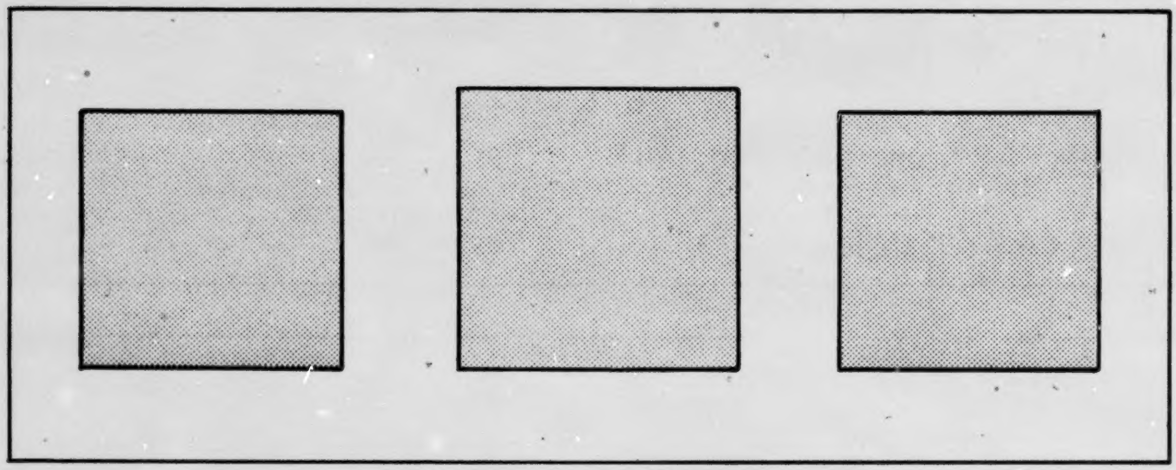


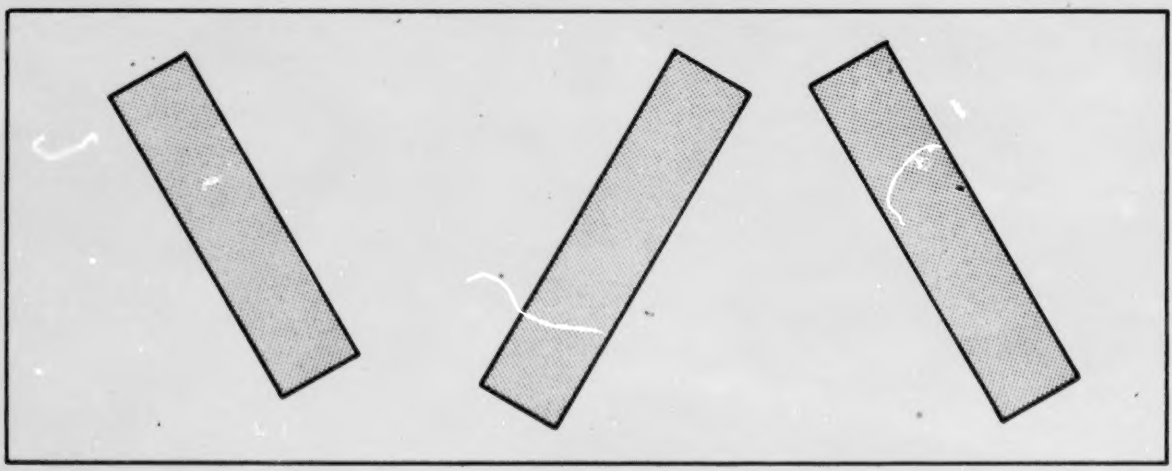
$\overline{EF}$ is congruent with ________, ________, and ________.

Regions

Mark the congruent rectangular regions.





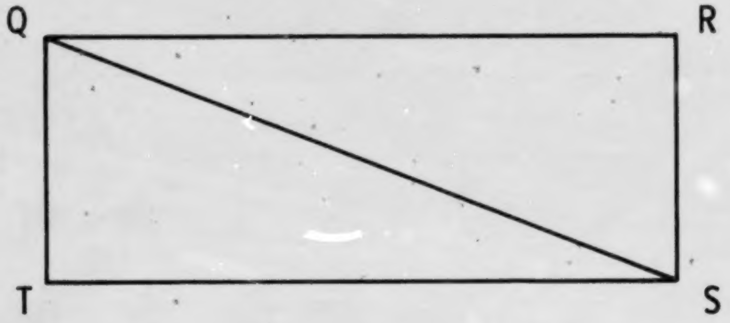


4. Here is a rectangular region.

Make a tracing of $\triangle QRS$.

Mark the points Q, R, and S on the tracing.

Fit the tracing on $\triangle STQ$.



$\overline{QR}$ is congruent with _________.

$\overline{RS}$ is congruent with _________.

$\angle RSQ$ is congruent with _________.

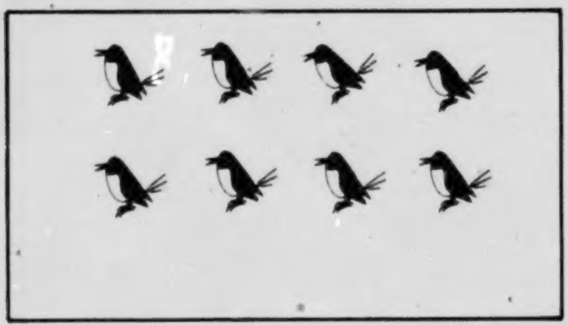
$\angle SQR$ is congruent with _________.

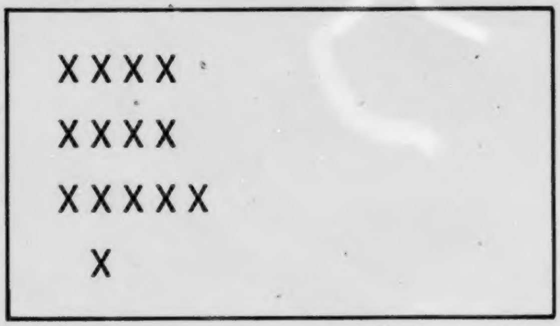
$\triangle QRS$ is congruent with _____________.

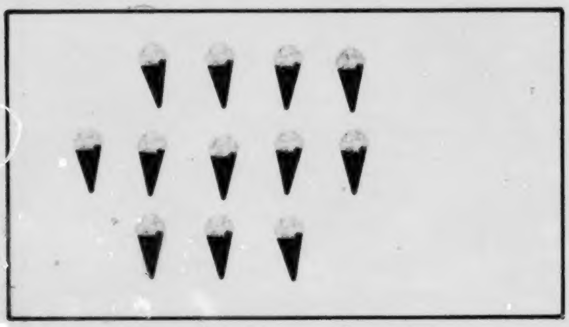
The triangular region QRS is congruent with the triangular region __________.

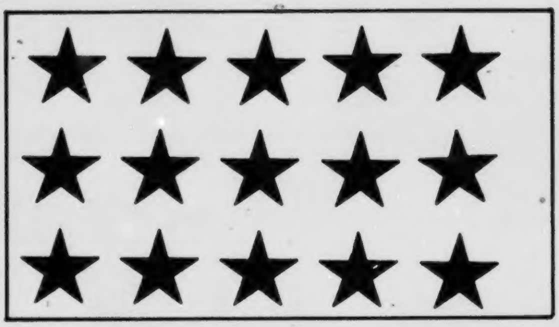
Arrays

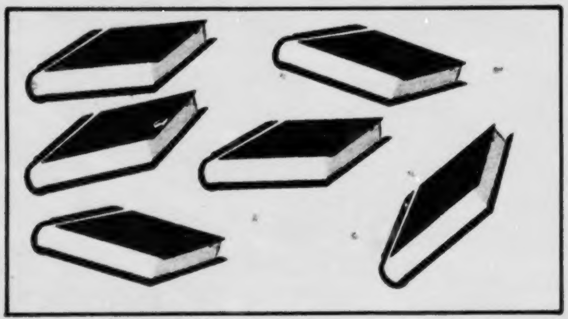
Cross out each picture below that does not show an array.

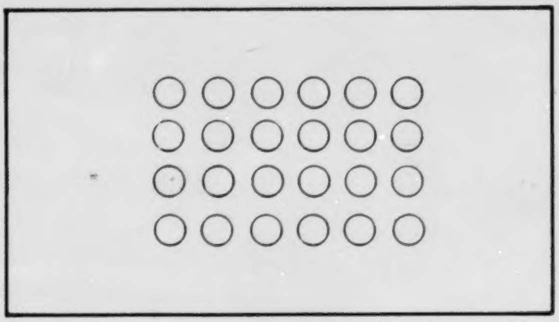


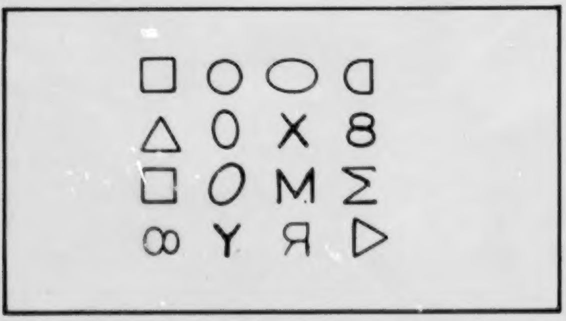

XXXX
XXXX
XXXXX
X

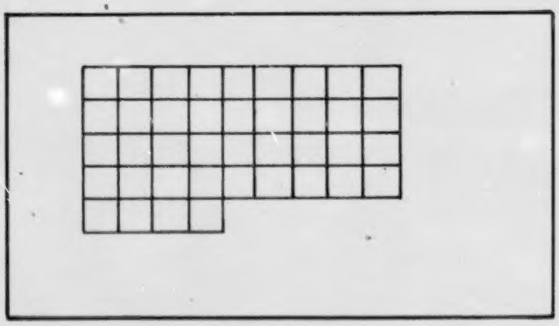






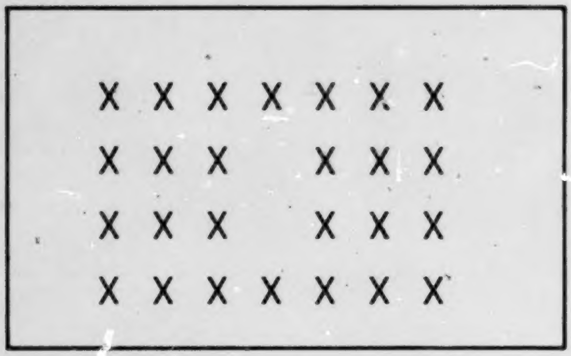


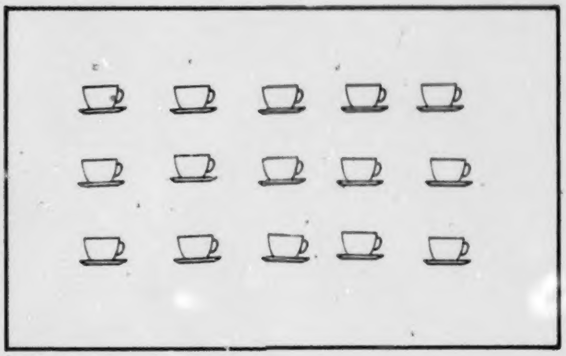


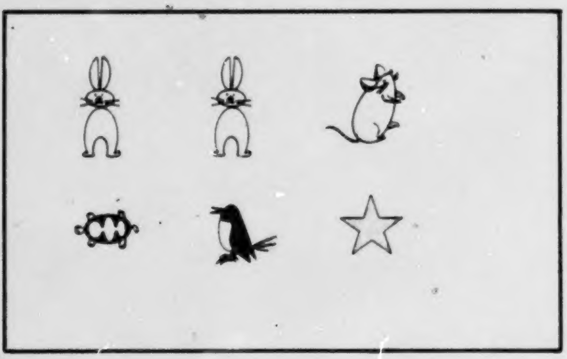


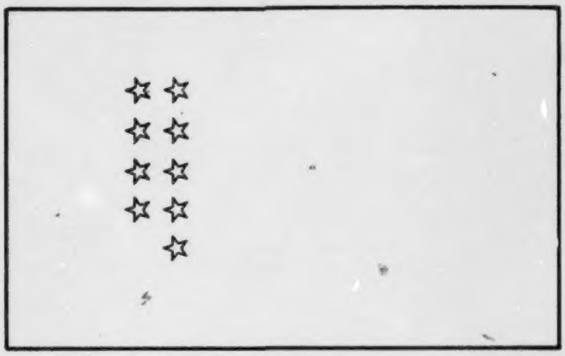
Arrays

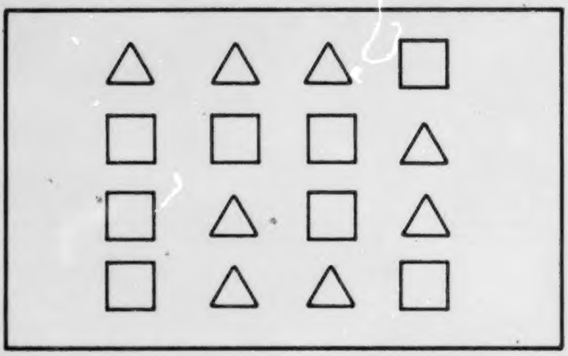
Cross out each picture below that does not show an array.

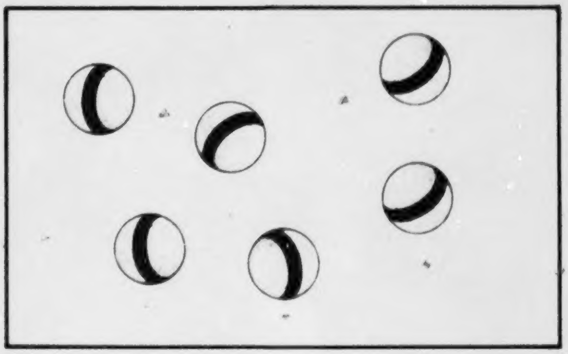


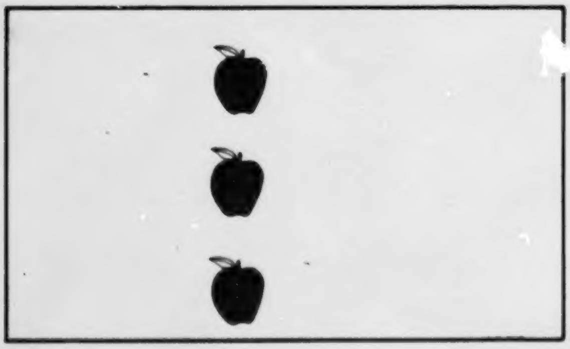


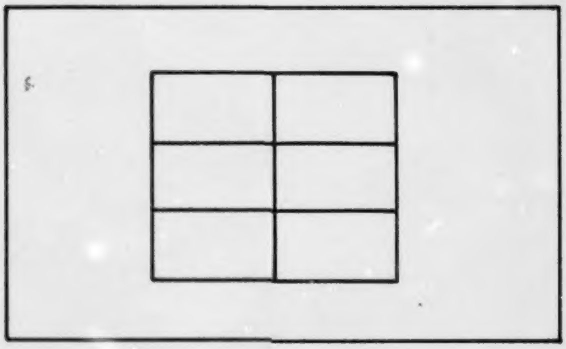




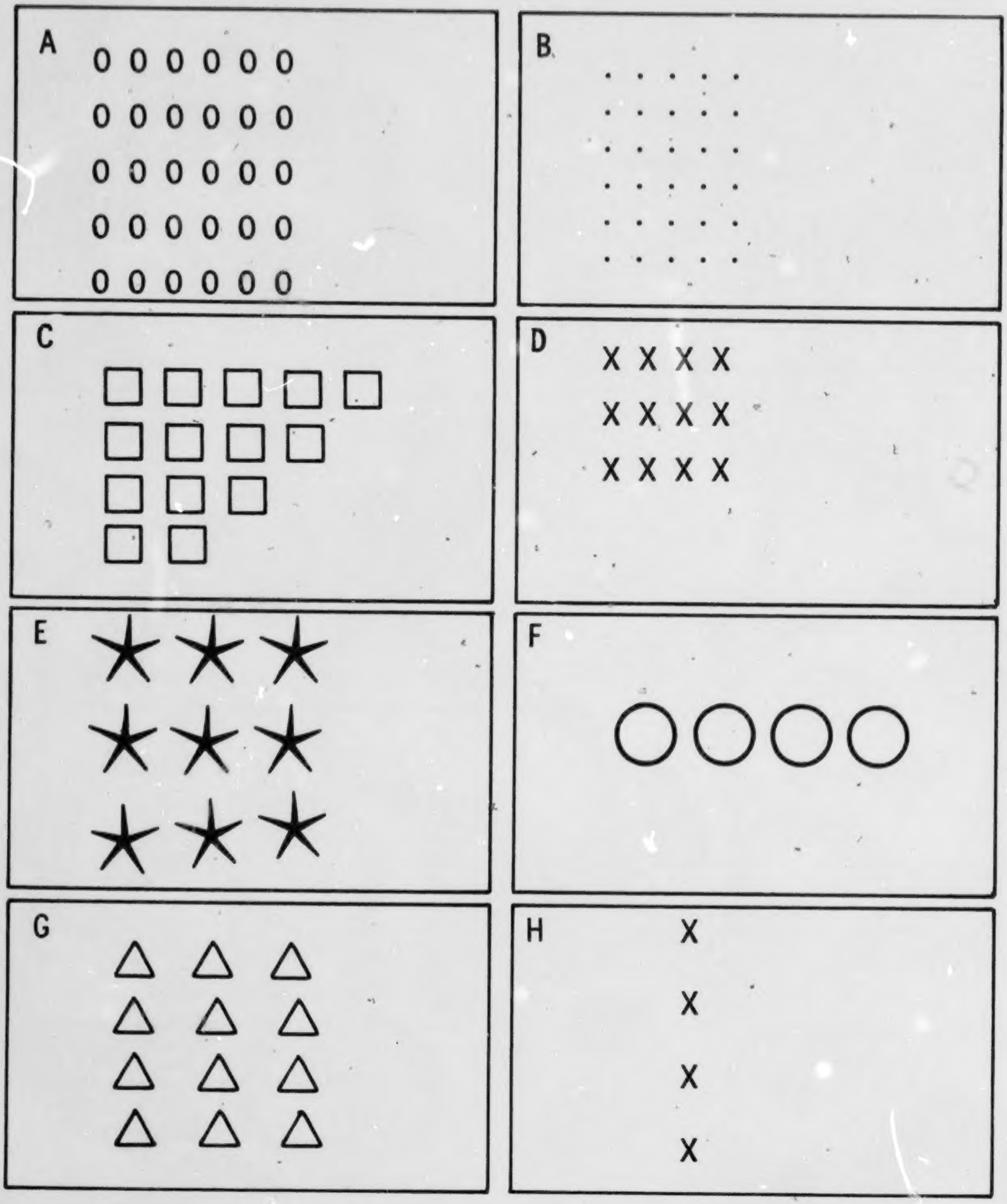








Arrays



Match each picture on page 218 with the sentences that describe it. Fill the blanks.

Picture ________ has 3 rows. There are 4 members in each row.

Picture ________ does not show an array. It does ________ have the same number of things in each row.

Picture ________ shows a 5 by 6 array. It has 5 rows and ________ members in each row.

Picture ________ shows a 6 by 5 array. It has ________ members in each row and ________ rows.

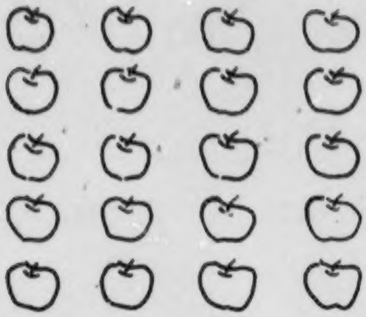
Picture ________ shows a 4 by 3 array. It has ________ rows and ________ members in each row.

Picture ________ shows a ________ by 1 array. It has ________ rows and ________ member in each row.

Picture ________ shows a 3 by 3 array. It has ________ members in each row and ________ rows.

Picture ________ shows a 1 by 4 array. It has ________ members in each row and ________ row.

Describing Arrays



Number of rows: ________

Number of members in each row: ________

This is a ______ by ______ array.

This array has ______ members.

X X X

X X X

Number of rows: ________

Number of members in each row: ________

This is a ______ by ______ array.

This array has ______ members.

□ □ □ □ □

□ □ □ □ □

□ □ □ □ □

Number of members in each row: ________

Number of rows: ________

This is a ______ by ______ array.

This array has ______ members.

△ △ △ △ △ △ △

△ △ △ △ △ △ △

△ △ △ △ △ △ △

Number of members in each row: ________

Number of rows: ________

This is a ______ by ______ array.

This array has ______ members.

Showing Arrays

Draw:

An array that has 4 rows of X's with 5 X's in each row.

We call this a ________ by ________ array.

An array that has 3 X's in each row with 5 rows.

We call this a ________ by ________ array.

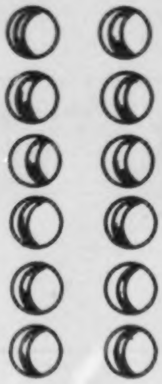
An array that has 6 rows of X's with 4 X's in each row.

We call this a ________ by ________ array.

An array that has 6 X's in each row with 3 rows.

We call this a ________ by ________ array.

Counting Members of Arrays



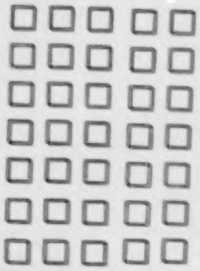
This is a ______ by ______ array.

Count by 2's.

___, ___, ___, ___, ___, ___

This array has _______ members.

2 + 2 + 2 + 2 + 2 + 2 = ________



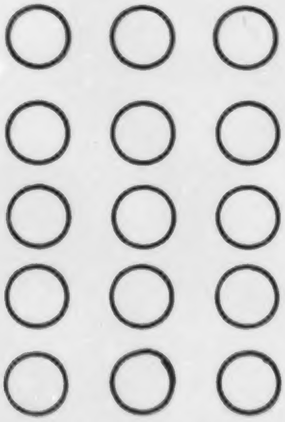
This is a ______ by ______ array.

Count by 5's.

___, ___, ___, ___, ___, ___, ___

This array has _______ members.

5 + 5 + 5 + 5 + 5 + 5 + 5 = _______



This is a ______ by ______ array.

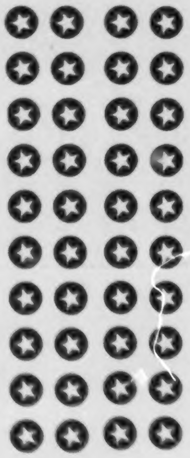
Count by 3's.

___, ___, ___, ___, ___

This array has _______ members.

3 + 3 + 3 + 3 + 3 = ______

Counting Members of Arrays



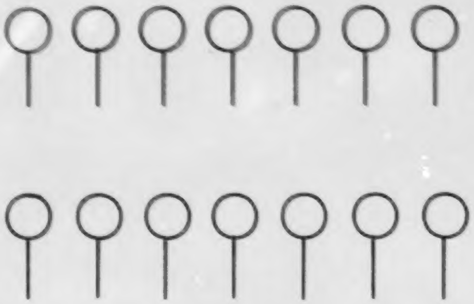
This is a ______ by ______ array.

Count by 4's.

_____, _____, _____, _____, _____,

_____, _____, _____, _____, _____

This array has ______ members.



This is a ______ by ______ array.

Count by 7's.

_____, _____

This array has ______ members.

7 + 7 = ______

Equations

▼ ▼ ▼
▼ ▼ ▼
▼ ▼ ▼
▼ ▼ ▼

4 rows

3 members in each row

12 members in the array

Equation: 4 × 3 = 12

X X X X X
X X X X X

_____ rows

_____ members in each row

_____ members in the array

Equation: __________

X X X
X X X
X X X
X X X
X X X
X X X

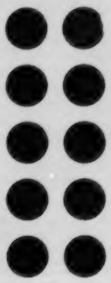
_____ rows

_____ members in each row

_____ members in the array

Equation: __________

Equations

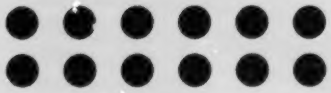


________ rows

________ members in each row

________ members in the array

Equation: ________________________

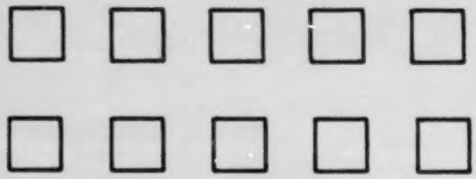


________ rows

________ members in each row

________ members in the array

Equation: ________________________

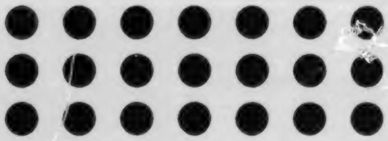


________ rows

________ members in each row

________ members in the array

Equations: ________________________



________ rows

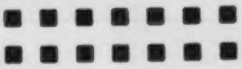
________ members in each row

________ members in the array

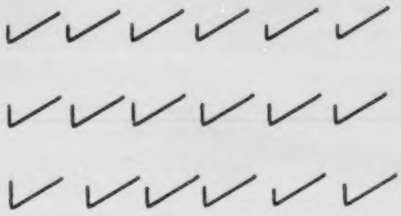
Equation: ________________________

Multiplication Equations

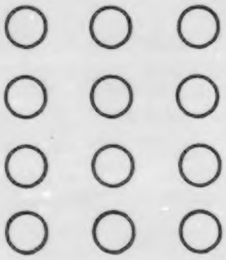
Write the equation for each array.



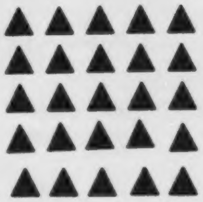
2 × 7 = 14



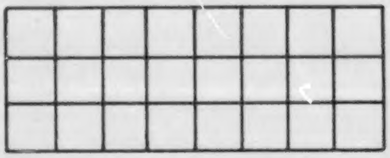
____



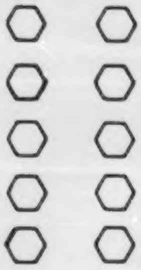
____



____

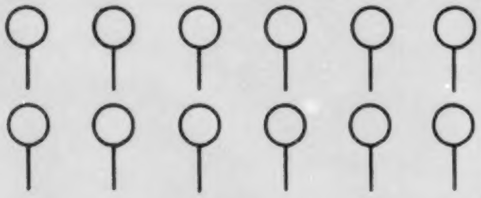


____



____

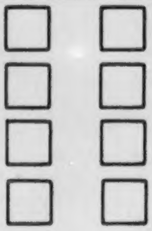
Products and Factors



Equation: ______________

Product: ______________

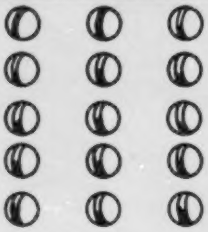
Factors: ________ and ________



Equation: ______________

Product: ______________

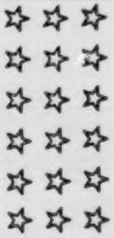
Factors: ________ and ________



Equation: ______________

Product: ______________

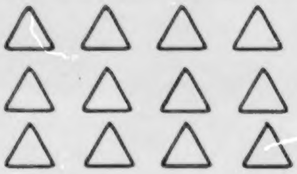
Factors: ________ and ________



Equation: ______________

Product: ______________

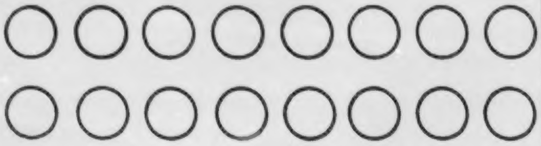
Factors: ________ and ________



Equation: ______________

Product: ______________

Factors: ________ and ________



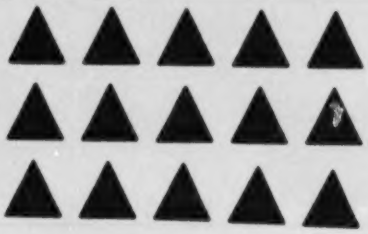
Equation: ______________

Product: ______________

Factors: ________ and ________

Products and Factors

Fill the blanks.



Equation: ________________

Product: ________________

Factors: ________ and ________

0 0 0 0
0 0 0 0
0 0 0 0
0 0 0 0

Equation: ________________

Product: ________________

Factors: ________ and ________

0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0

Equation: ________________

Product: ________________

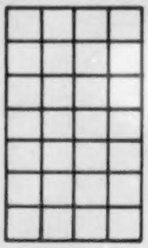
Factors: ________ and ________

0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0

Equation: ________________

Product: ________________

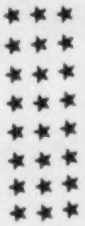
Factors: ________ and ________



Equation: ________________

Product: ________________

Factors: ________ and ________



Equation: ________________

Product: ________________

Factors: ________ and ________

The Product of Two Factors

Draw a 6 by 3 array. Use X's.

6 × 3 = ______

Draw a 3 by 6 array. Use X's.

3 × 6 = ______

Is 6 × 3 = 3 × 6? ____________

Draw a 4 by 5 array. Use X's.

4 × 5 = ______

Draw a 5 by 4 array. Use X's.

5 × 4 = ______

Is 4 × 5 = 5 × 4? ____________

★ Order in Factors

Fill the blanks.

3 × 5 = 5 + 5 + 5

3 × 5 = _________

5 × 3 = 3 + 3 + 3 + 3 + 3

5 × 3 = _________

3 × 5 = 5 × _______

4 × 2 = 2 + 2 + 2 + 2

4 × 2 = _________

2 × 4 = 4 + 4

2 × 4 = _________

4 × 2 = _______ × 4

2 × 5 = 5 + 5

2 × 5 = _________

5 × 2 = 2 + 2 + 2 + 2 + 2

5 × 2 = _________

2 × _______ = 5 × 2

2 × 9 = 18

9 × 2 = _____

8 × 3 = 24

3 × 8 = _____

7 × 4 = 28

4 × _____ = 28

2 × 8 = 16

8 × 2 = _____

2 × 6 = 12

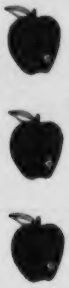
6 × _____ = 12

2 × 3 = _____

3 × 2 = _____

One As a Factor

Fill the blanks.



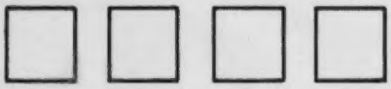
________ rows

________ member in each row

Equation: ____________________

Product: ____________________

Factors: ______ and ______



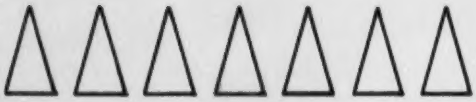
________ row

________ members in each row

Equation: ____________________

Product: ____________________

Factors: ______ and ______



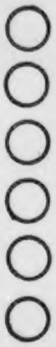
________ row

________ members in each row

Equation: ____________________

Product: ____________________

Factors: ______ and ______



________ rows

________ member in each row

Equation: ____________________

Product: ____________________

Factors: ________ and ________

One As a Factor

Fill the blanks.

X
X
X
X

Equation: __________________

Product: ________ Factors: ____ and ____

XXXX

Equation: __________________

Product: ________ Factors: ____ and ____

---

9 × 1 = _____

4 × 1 = _____

1 × 6 = _____

1 × 32 = _____

589 × 1 = _____

27 × 1 = _____

1 × _____ = 5

6 × _____ = 6

7 × _____ = 7

1 × _____ = 59

100 × 1 = _____

1 × 455 = _____

1 × _____ = 1

_____ × 1 = 1

Multiplication

Fill the blanks.

2 × 3 = _____

2 × 8 = _____

2 × 6 = _____

5 × 1 = _____

3 × 2 = _____

7 × 1 = _____

4 × 0 = _____

0 × 9 = _____

7 × 2 = _____

8 × 0 = _____

1 × 9 = _____

2 × 2 = _____

2 × 4 = _____

0 × 8 = _____

2 × 7 = _____

1 × 8 = _____

4 × 2 = _____

2 × 5 = _____

0 × 7 = _____

9 × 1 = _____

2 × 9 = _____

1 × 5 = _____

6 × 0 = _____

2 × 1 = _____

_____ × 6 = 0

4 × _____ = 4

_____ × 39 = 39

9 × 2 = _____

6 × 2 = _____

5 × _____ = 10

92 × _____ = 0

74 × 0 = _____

2 × _____ = 0

1 × _____ = 3

1 × _____ = 7

468 × 1 = _____

1 × _____ = 92

3 × _____ = 3

8 × 2 = _____

Using Arrays

This is a 2 by 6 array.

A A A A A A

A A A A A A

2 × 6 = ____________

This is a 1 by 6 array.

Q Q Q Q Q Q

1 × 6 = ____________

12 + 6 = -----

This is a 3 by 6 array.

D D D D D D

D D D D D D

D D D D D D

3 × 6 = -----

This is a 4 by 9 array.

B B B B B B B B B

B B B B B B B B B

B B B B B B B B B

B B B B B B B B B

4 × 9 = -----

Show how it can be separated into a 3 by 9 array and a 1 by 9 array.

A 3 by 9 array has _________ members.

A 1 by 9 array has _________ members.

27 + 9 = -----

This is a 4 by 5 array.

W W W W W
W W W W W
W W W W W
W W W W W

4 × 5 = _____

Show how it can be separated into a 4 by 3 array and a 4 by 2 array.

4 × 3 = _____

4 × 2 = _____

12 + 8 = _____

This is a 3 by 7 array.

G G G G G G G
G G G G G G G
G G G G G G G

3 × 7 = _____

Show how it can be separated into a 3 by 5 array and a 3 by 2 array.

3 × 5 = _____

3 × 2 = _____

15 + 6 = _____

Draw arrays to find the products.

Use X's.

2 × 6 = _____	2 × 9 = _____
1 × 6 = _____	1 × 9 = _____
3 × 6 = _____	3 × 9 = _____
2 × 7 = _____	2 × 4 = _____
1 × 7 = _____	1 × 4 = _____
3 × 7 = _____	3 × 4 = _____

★ **Multiplication. Fill the blanks.**

2 × 8 = _____ 1 × 8 = _____ 3 × 8 = _____	2 × 4 = _____ 1 × 4 = _____ 3 × 4 = _____	1 × 6 = _____ 2 × 6 = _____ 3 × 6 = _____
1 × 5 = _____ 2 × 5 = _____ 3 × 5 = _____	2 × 7 = _____ 1 × 7 = _____ 3 × 7 = _____	2 × 9 = _____ 1 × 9 = _____ 3 × 9 = _____
2 × 3 = _____ 1 × 3 = _____ 3 × 3 = _____	2 × 1 = _____ 1 × 1 = _____ 3 × 1 = _____	2 × 2 = _____ 1 × 2 = _____ 3 × 2 = _____

Fill the boxes:

×	5	9	7	4	10	8	3	6	2
3									

×	5	9	7	4	10	8	3	6	2
2									

×	2	1	3
8			

×	3	1	2
9			

★ Show on the table:

products with 2 as a factor.

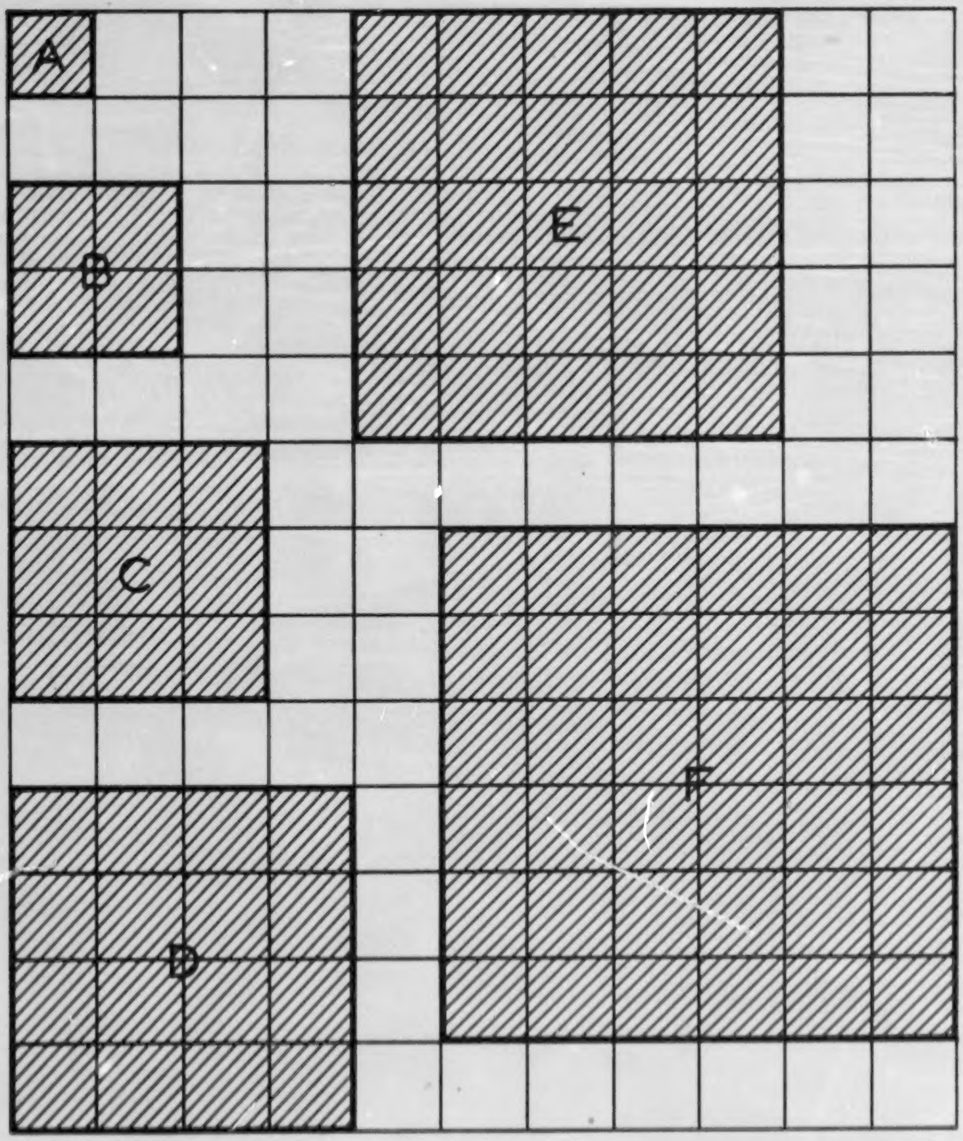
products with 0 as a factor.

products with 5 as a factor.

×	0	1	2	3	4	5	6	7	8	9
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										

Show any other products you know.

★ A Special Kind of Array



Write equations suggested by the above arrays:

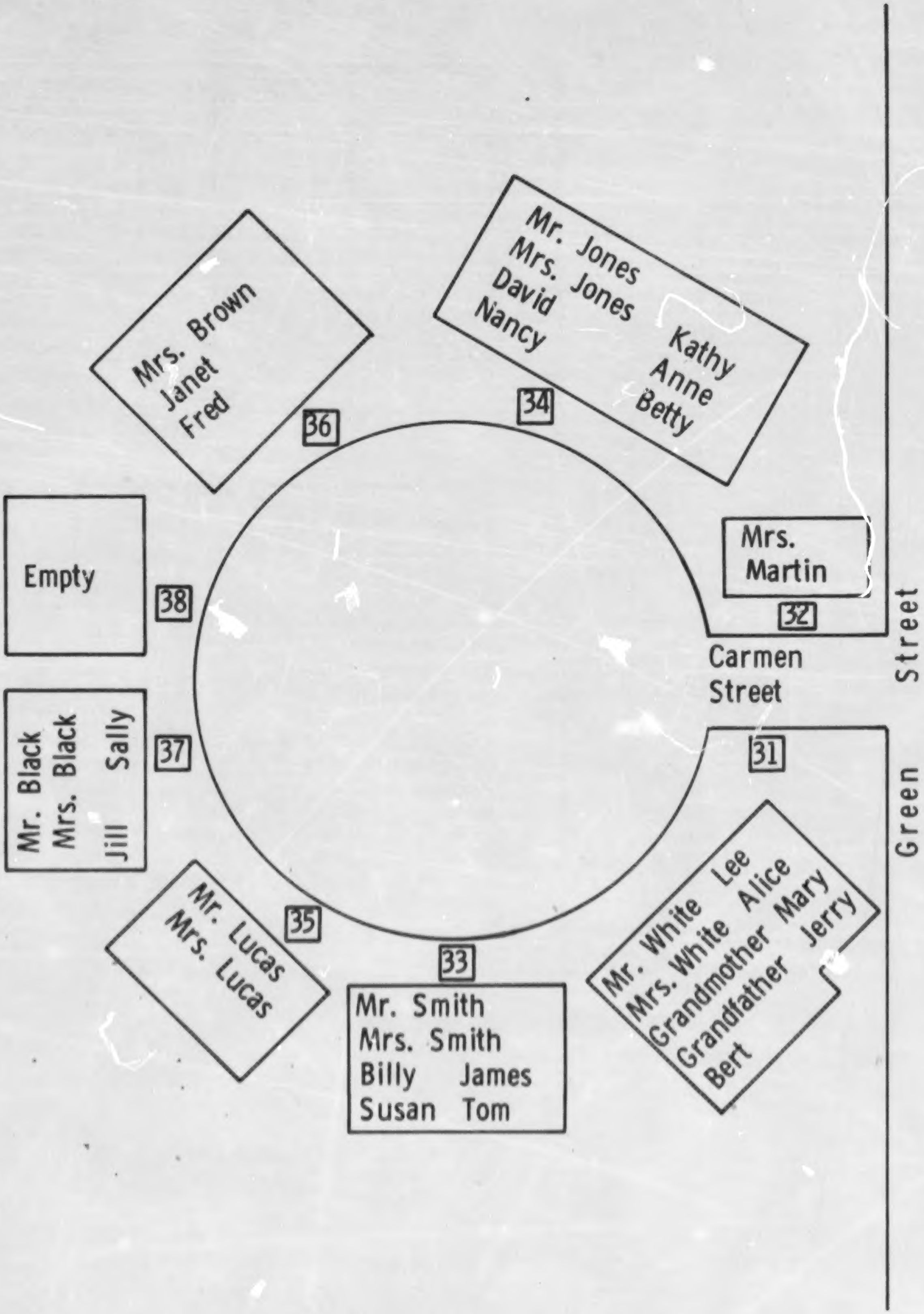
A. ________________ D. ________________

B. ________________ E. ________________

C. ________________ F. ________________

In each equation, the same factor is used ______ times.

Each array is a special kind of rectangle called a ______________.


Mr. Jones
Mrs. Jones
David
Nancy
Kathy
Anne
Betty
34
Mrs. Brown
Janet
Fred
36
Mrs.
Martin
32
Empty
38
Carmen
Street
Green Street
31
Mr. Black
Mrs. Black
Jill
Sally
37
Mr. White
Mrs. White
Grandmother
Grandfather
Bert
Lee
Alice
Mary
Jerry
Mr. Lucas
Mrs. Lucas
35
33
Mr. Smith
Mrs. Smith
Billy
James
Susan
Tom

Christmas on Carmen Street

Mrs. Martin baked Christmas cookies. She wanted to send 5 cookies to every person on Carmen Street. How many cookies did she send to each house?

______ cookies to $\boxed{31}$
______ cookies to $\boxed{35}$
______ cookies to $\boxed{36}$
______ cookies to $\boxed{38}$

______ cookies to $\boxed{33}$
______ cookies to $\boxed{37}$
______ cookies to $\boxed{34}$

How many cookies did she send in all? ______________

Mrs. Jackson used to live at 38 Carmen St. She mailed boxes of candy to all the people who were her neighbors. She sent 3 pieces of candy for each person. How many pieces did she send to each house?

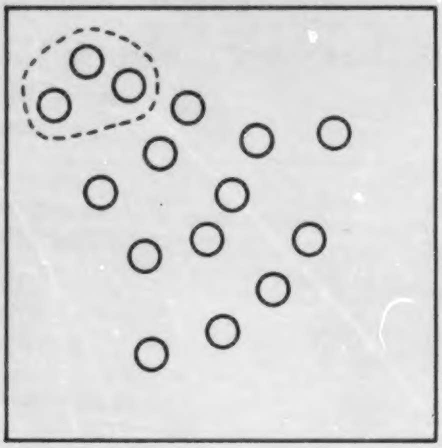
______ pieces to $\boxed{31}$
______ pieces to $\boxed{35}$
______ pieces to $\boxed{32}$
______ pieces to $\boxed{36}$

______ pieces to $\boxed{33}$
______ pieces to $\boxed{37}$
______ pieces to $\boxed{34}$
______ pieces to $\boxed{38}$

How many pieces did she send in all? ________________

Partitioning Sets

Find the number of rows.



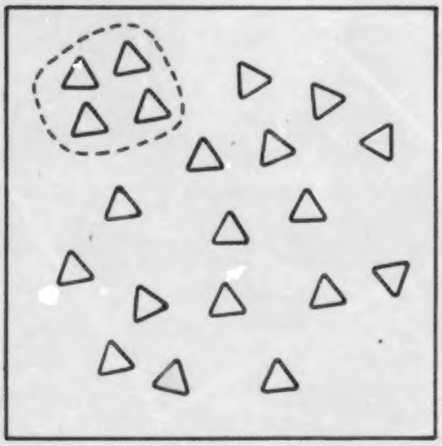
This set has 15 members.

Draw an array.

○○○

There are ________ threes in 15.

________ × 3 = 15



This set has 20 members.

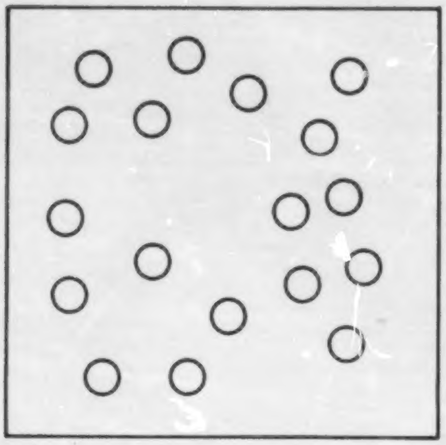
Draw an array.

△△△△

There are ________ fours in 20.

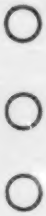
________ × 4 = 20

Find the number of members in each row.

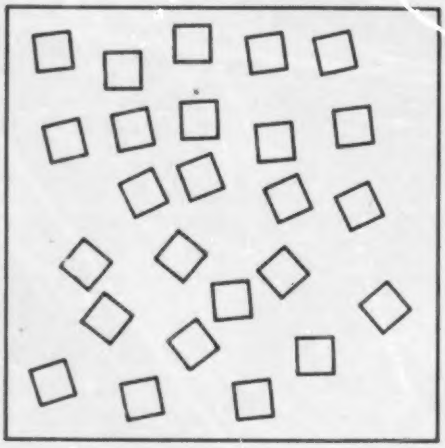


This set has 18 members.

Draw an array.

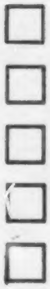


3 × ________ = 18



This set has 25 members.

Draw an array.

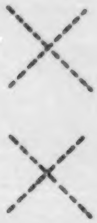


5 × ________ = 25

Use X's to draw arrays.

An array has 14 members.

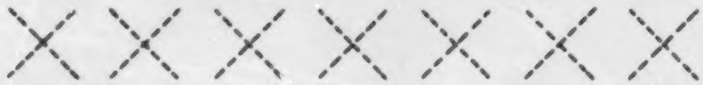
It has 2 rows.



Equation: 2 × ________ = 14

An array has 21 members.

It has 7 members in each row.



Equation: ________ × 7 = 21

An array has 24 members.

It has 6 members in each row.

Equation: ____________________ = 24

The Quotient of Two Numbers

Draw an array. Use X's.

Fill the blanks.

_________ × 6 = 12

$\frac{12}{6}$ = _________

X X X X X X

X X X X X X

---

2 × _________ = 8

$\frac{8}{2}$ = _________

X X X X

X X X X

_________ × 9 = 18

$\frac{18}{9}$ = _________

_________ × 7 = 21

$\frac{21}{7}$ = _________

---

5 × _________ = 15

$\frac{15}{5}$ = _________

The Quotient of Two Numbers

Draw arrays. Use X's.

Fill the blanks.

$3 \times$ __________ $= 9$

$\frac{9}{3} =$ __________

$5 \times$ __________ $= 30$

$\frac{30}{5} =$ __________

__________ $\times 4 = 20$

$\frac{20}{4} =$ __________

__________ $\times 2 = 14$

$\frac{14}{2} =$ __________

$8 \times$ __________ $= 24$

$\frac{24}{8} =$ __________

Using Subtraction

How many times do you subtract?

$\frac{27}{9}$ = ________

$$\begin{array}{r} 27 \\ -\ 9 \\ \hline 18 \\ -\ 9 \\ \hline 9 \\ -\ 9 \\ \hline 0 \end{array}$$

$\frac{32}{8}$ = ________

$$\begin{array}{r} 32 \\ -\ 8 \\ \hline \end{array}$$

$\frac{15}{5}$ = ________

$$\begin{array}{r} 15 \\ -\ 5 \\ \hline \end{array}$$

$\frac{14}{7}$ = ________

$$\begin{array}{r} 14 \\ -\ 7 \\ \hline \end{array}$$

$\frac{30}{5}$ = ________

$$\begin{array}{r} 30 \\ -\ 5 \\ \hline \end{array}$$

$\frac{28}{4}$ = ________

$$\begin{array}{r} 28 \\ -\ 4 \\ \hline \end{array}$$

Using Addition or Subtraction

Add to find the answer.

3 × 32 = _____

$\begin{array}{r} 32 \\ +\underline{32} \\ \\ +\underline{32} \end{array}$

4 × 21 = _____

$\begin{array}{r} 21 \\ +\underline{21} \\ \\ +\underline{21} \\ \\ +\underline{21} \end{array}$

2 × 65 = _____

$\begin{array}{r} 65 \\ +\underline{65} \end{array}$

3 × 34 = _____

$\begin{array}{r} 34 \\ +\underline{34} \\ \\ +\underline{34} \end{array}$

Subtract to find the answer.

$\frac{98}{49}$ = ________

$\begin{array}{r} 98 \\ -\underline{49} \\ \\ -\underline{49} \end{array}$

$\frac{84}{12}$

$\begin{array}{r} 84 \\ -\underline{12} \end{array}$

Finding Quotients

Find n. Use multiplication facts, arrays, or subtraction.

$n \times 6 = 18$

$n = \frac{18}{6}$

n = ______

$n \times 1 = 14$

$n = \frac{14}{1}$

n = ______

$8 \times n = 24$

$n = \frac{24}{8}$

n = ______

$n \times 62 = 62$

$n = \frac{62}{62}$

n = ______

$n \times 5 = 45$

$n = \frac{45}{5}$

n = ______

$1 \times n = 97$

$n = \frac{97}{1}$

n = ______

$2 \times n = 18$

$n = \frac{18}{2}$

n = ______

$75 \times n = 75$

$n = \frac{75}{75}$

n = ______

Finding Quotients
Fill the blanks.

$\frac{27}{9} =$ ________

$\frac{50}{10} =$ ________

$\frac{20}{2} =$ ________

$\frac{12}{4} =$ ________

$\frac{16}{4} =$ ________

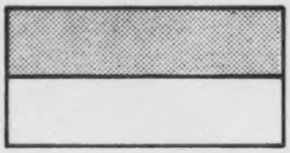
$\frac{43}{43} =$ ________

$\frac{70}{10} =$ ________

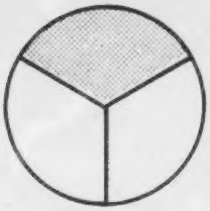
$\frac{595}{1} =$ ________

Rational Numbers and Fractions

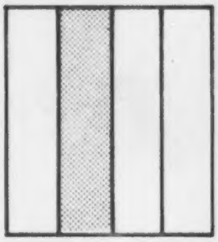
Ring the fraction that shows what part is shaded.



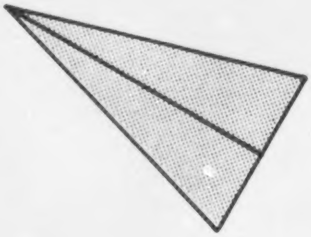
$\frac{2}{2}$ $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$



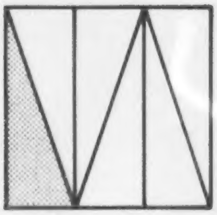
$\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{3}$ $\frac{1}{3}$



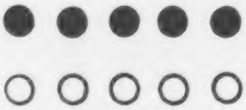
$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{6}$



$\frac{2}{2}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{2}{3}$



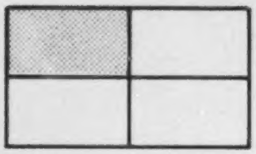
$\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{6}$



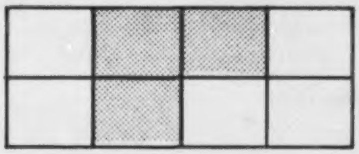
$\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{6}$

Fractions

Write the fraction that shows what part is shaded.



$\frac{1}{4}$



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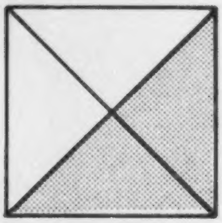

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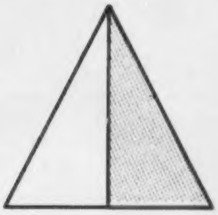

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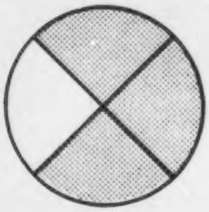

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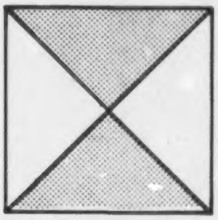

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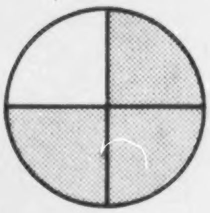

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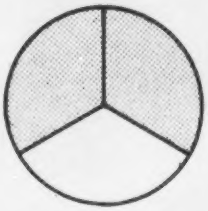

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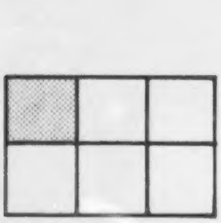

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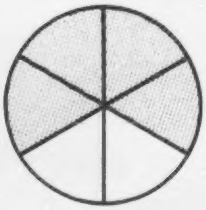
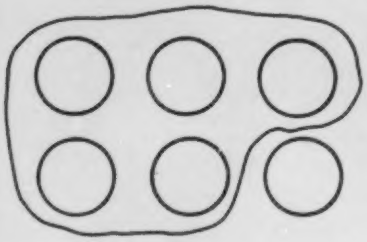


____

Fractions

Ring the part of the set shown by the fraction.



$\frac{5}{6}$

● ● ●
● ● ●

$\frac{2}{3}$

× × ×
× × ×

$\frac{4}{6}$

A A
A A

$\frac{1}{4}$

B B
B B

$\frac{1}{2}$

C C C C
C C C C

$\frac{3}{4}$

△ △
△ △
△ △

$\frac{1}{6}$

□ □ □
□ □ □

$\frac{1}{3}$

○ ○
○ ○

$\frac{3}{4}$

× × × ×
× × × ×

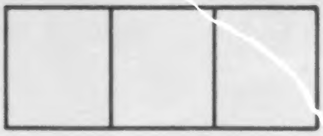
$\frac{1}{8}$

△ △
△ △
△ △
△ △

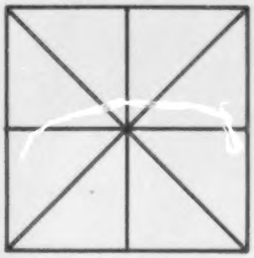
$\frac{7}{8}$

Fractions

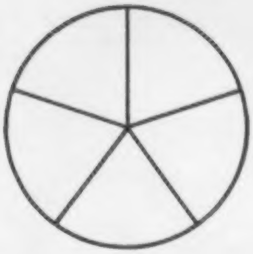
Shade the part shown by the fraction.



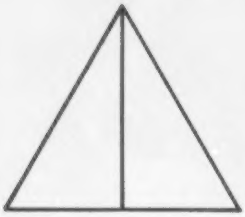
$\frac{1}{3}$



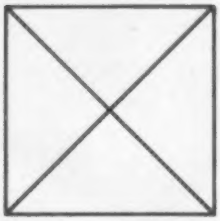
$\frac{5}{8}$



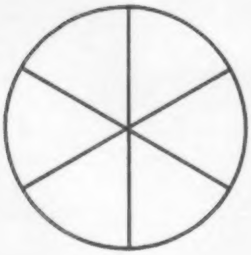
$\frac{2}{5}$



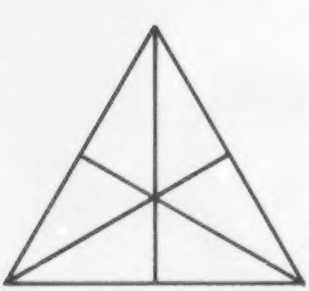
$\frac{2}{2}$



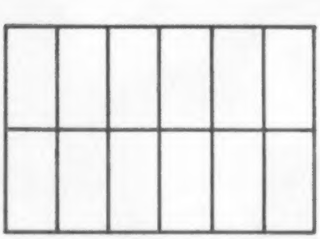
$\frac{3}{4}$



$\frac{5}{6}$

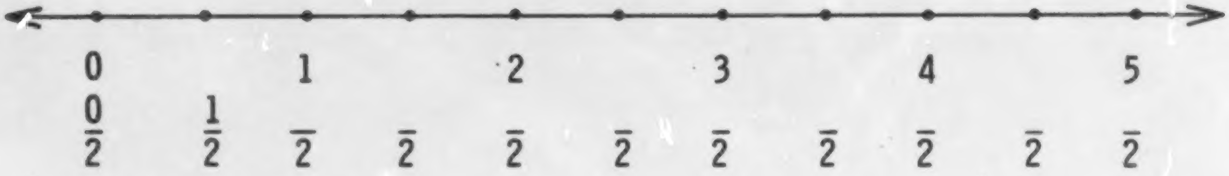


$\frac{1}{6}$

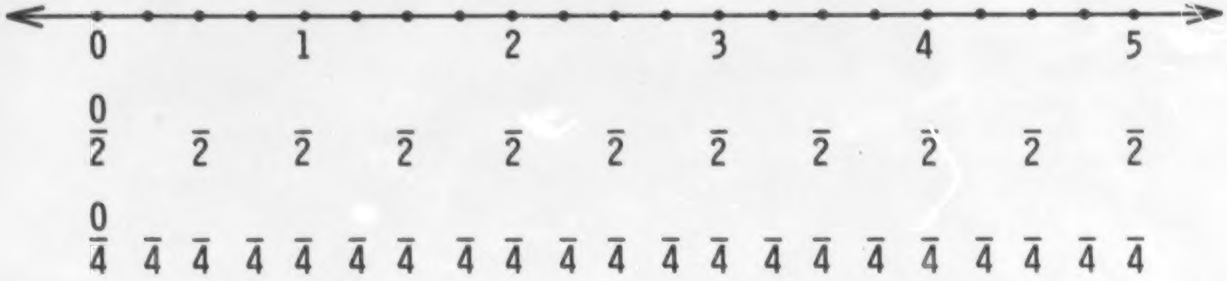


$\frac{6}{12}$

The Number Line

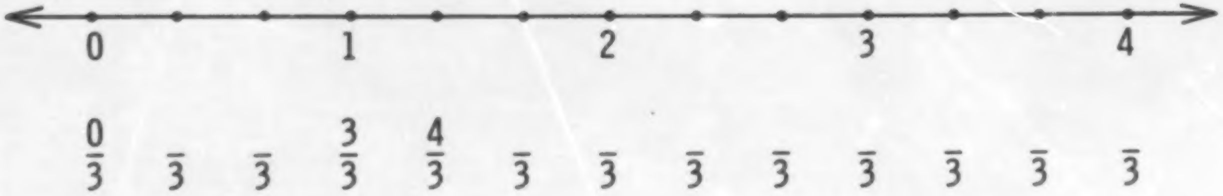

0 1 2 3 4 5
$\frac{0}{2}$ $\frac{1}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$

Name points to show halves. Show the sum of $\frac{3}{2}$ and $\frac{3}{2}$. $\frac{3}{2} + \frac{3}{2} =$ ________

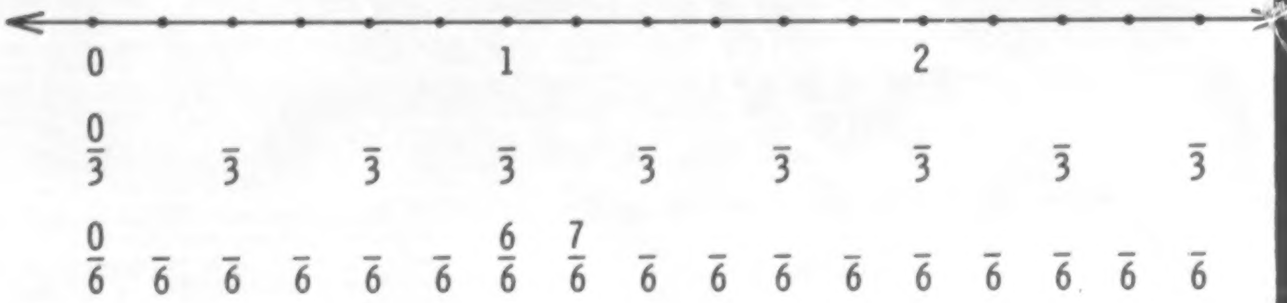

0 1 2 3 4 5
$\frac{0}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$ $\frac{}{2}$
$\frac{0}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$ $\frac{}{4}$

Name points to show halves and fourths. $\frac{2}{4} + \frac{3}{4} =$ ________

The Number Line


0
1
2
3
4
$\frac{0}{3}$
$\frac{3}{3}$
$\frac{4}{3}$

Name points to show thirds. $\frac{2}{3} + \frac{3}{3} =$ ________


0
1
2
$\frac{0}{3}$
$\frac{0}{6}$
$\frac{6}{6}$
$\frac{7}{6}$

Name points to show thirds and sixths. $\frac{2}{6} + \frac{3}{6} =$ ________

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